COMPETENCIES IN THE TRAINING OF RESOURCE TEACHERS LEARNING AND BEHAVIOUR: AN EVALUATION

A thesis in partial fulfillment of the requirements for

the Degree of

Doctor of Philosophy in Education

in the University of Canterbury

By

Marcia Pilgrim

School of Teacher Education

University of Canterbury

New Zealand

2015

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to the many people who have supported me through this long journey and contributed to the completion of this thesis.

First and foremost, I would like to specially acknowledge and thank my excellent team of supervisors: Professor John Everatt, my senior supervisor, Professor Angus Macfarlane, my co-supervisor and Professor Garry Hornby, my associate supervisor. No student could have asked for a better team! Their vast professional knowledge and experience and their careful guidance over the last four years has greatly enriched my understanding in the field and enabled me to bring this work to fruition.

I should also like to thank the following people:

The members of the Post Graduate Diploma in Specialist Teaching team and in particular the directors and coordinators of the programme, Dr. Jill Bevan-Brown, Dr. Alison Kearney, Dr. Mandia Mentis and Dr. Dean Sutherland for their advice and their support of this project;

The first cohort of graduates of the Learning and Behaviour endorsement of the Programme whose commitment to their professional learning and development and to the education and wellbeing of students with learning and behavior difficulties in Aotearoa New Zealand was inspirational. I would particularly like to warmly thank those graduates who took the time to participate in this research project despite their very busy and demanding professional schedules;

Dr. Pat Coope for her advice on statistics;

Dr. Sonja Macfarlane for her very helpful feedback during the drafting process of this work;

My wonderful family for their ongoing love, support and encouragement that has made this journey possible. You are the lights of my life. Thank you!

DEDICATION

This thesis is dedicated to the memory of my father, Vincent Montrose Pilgrim.

ABSTRACT

The Resource Teacher Learning and Behaviour (RTLB) service was formed in Aotearoa New Zealand as a key part of national educational policy to create a world-class inclusive education system. In order to provide an up-to-date training programme for RTLB the New Zealand government in 2010 contracted two universities to develop a competency-based, blended learning programme that could be accessed by teachers throughout the country.

The relevant literature on competency-based approaches in education, adult learning and e-learning highlight the requirement for carefully selecting programme competencies, taking account of the needs of adult learners, as well as realizing the potential of the e-learning environment to provide increased opportunities for meaningful learning through engagement in communities of practice. The present research was conducted to look for evidence that the new programme was addressing these key issues that are highlighted in the literature.

Through a mixed-method study, this thesis investigates the perceptions of the first cohort of graduates of the training programme developed for RTLB. The research design involved an online questionnaire survey completed by over half of the graduates, followed by six focus group interviews conducted with a selection of participants. The study specifically examined the importance of the 51 programme competencies to the work of participants and how well enabled participants considered they had been to develop these competencies. Factors that enabled participants to develop competencies in the context of the programme were investigated, as well as those that acted as barriers to competency enablement.

Results indicated that all of the programme competencies were perceived by participants to be of high importance to their work in the field of learning and behaviour difficulties and that they were well enabled to develop these competencies. Participants considered that a range of factors acted as barriers to or enablers of competency development. These focused on five overarching themes related to: course content, relevance, clarity and structure; supports; managing time and pressure; pre-requisite knowledge, skills, and experience; and, access to technology.

Based on these findings, implications for practice relevant to programme coordinators, RTLB managers, school principals, policy makers and for Māori, are discussed. Limitations of the research study are identified and recommendations for future research are made.

LIST OF ABBREVIATIONS

ANOVA – Analysis of Variance

CEC – Council for Exceptional Children

CoI - Community of Inquiry

CoP - Community of Practice

Core - Core Theory and Foundations of Specialist Teaching

ERO - Education Review Office

EBIP - Evidence-Based Inter-professional Practice

IDEA - Individuals with Disabilities Education Act

IEP – Individual Education Plan

L & B - Theory and Foundations of Learning and Behaviour Diversity

PISA - Programme for International Student Assessment

PGDipST (L&B) - Post Graduate Diploma in Specialist Teaching, Learning and Behaviour endorsement

RTLB - Resource Teacher Learning and Behaviour

SE 2000 - Special Education 2000

SEN - Special Educational Needs

SPSS – Statistical Packages for the Social Sciences

LIST OF TABLES

LIST OF APPENDICES

CHAPTER ONE: INTRODUCTION

"The quality of educational services for individuals with exceptionalities resides in the abilities, qualifications, and competencies of the personnel who provide the services" (Council for Exceptional Children, 2008, p. 1V).

This introductory chapter aims to clarify the context for the research study reported in this thesis. The study investigated perceptions of graduates of the Post Graduate Diploma in Specialist Teaching, Learning and Behaviour endorsement (PGDipST (L&B) with regard to the importance of competencies addressed in the programme and the extent to which they were enabled to develop these competencies. The study also sought to identify factors that participants perceived to be barriers to and enablers of their competency development.

The chapter starts with a brief outline of the global context within which countries continue to seek to improve their educational systems and outcomes for students. Next, the unique cultural context of education in Aotearoa New Zealand is discussed, particularly as it relates to ensuring equitable outcomes for students by raising the achievement of indigenous Māori students and other priority learners. The role of the Resource Teacher Learning and Behaviour (RTLB) in supporting schools to improve student performance is then described and the previous training programme that aimed at preparing RTLB for their role is outlined. The new RTLB training programme, the focus of this study, is then described and the overall aim of the research, to help inform the development of the programme, is explained. Finally the specific research questions addressed in this study are presented and a brief overview of the thesis provided.

The Global Context

Globalization can be defined as, "… the movement of goods, services, people, and ideas across national borders" (Merriam & Bierema, 2014, p. 2). With the continuing development of technology, information is expanding rapidly and being exchanged at unprecedented speed. As a result, knowledge has become the most valued commodity in global economic activity (Carnoy, 1999; Dumont & Istance, 2010). It is in this context that governments internationally recognize the importance to their economies of ensuring a well-educated, globally competitive workforce and are focused on the quality of their educational systems. The effectiveness of education systems is increasingly being compared through, for example, the publishing of PISA survey results (Dumont & Istance, 2010; OECD, 2012). In addition, nation states are continuing to be subject to international educational ideology supported by agencies such as UNESCO and the OECD (Mitchell, 2010). It is through such mechanisms that educational issues have been brought squarely into the public spotlight.

Because of the high value placed on knowledge construction and educational attainment globally, the quality of teaching and teachers is a fundamental concern of governments (Carnoy, 1999). Alongside this focus on achieving high standards in education is an international focus on ensuring that educational systems are inclusive, with the goal of ensuring that all individuals are able to participate in society and reach their full potential (Mitchell, 2010; UNESCO, 2009). This trend towards the promotion of inclusive education is underpinned by international agreements such as the *Salamanca Statement* (UNESCO, 1994) and the *Convention of the Rights of Disabled Persons* (United Nations, 2006) that has been ratified by 87 countries, including New Zealand (Mitchell, 2010). Inclusion may be considered a trend towards

supporting diversity amongst all learners (Ainscow, Booth & Dyson, 2006; Mitchell, 2010; UNESCO, 2009).

It is considered important that attention is paid to ensuring equity of educational outcomes in the face of an increasing social divide between the educational "haves" and "have-nots" (OECD, 2014, p. 14) as this divide constitutes a threat to societies as a whole. This issue of educational equity for students regardless of their background is international in scope, despite increasing expenditure on education (OECD, 2012; Savage, Hindle, Meyer, Hynds, Penetito & Sleeter, 2011). As Carnoy (1999) asserts with respect to this challenge, however, there is not one recipe that can be followed in order to ensure significant changes to educational outcomes. "The situation in each country is different and therefore each country needs to respond to the challenge with its own strategy for educational improvement" (Carnoy, 1999, p. 82).

An important way in which the government of Aotearoa New Zealand has sought to improve educational outcomes and improve inclusive practices in schools is through the creation of a Resource Teacher Learning and Behaviour (RTLB) service, implemented as a result of the *Special Education 2000 (SE 2000)* policy. As part of this policy provision was also made for the introduction of a training programme for these specialist teachers (Education Review Office, 2004; Thomson et al., 2003). Two training programmes have been developed to meet the needs of these teachers. It is the second of these programmes, which commenced in February, 2011, that is the subject of the study reported in this thesis.

The Cultural Context of Education in Aotearoa New Zealand

As indicated above, educational issues and solutions must take into account the unique national context in which the education system exists. Central to an

understanding of education in Aotearoa New Zealand, and the competencies that are important for RTLB to develop, is an understanding of Aotearoa New Zealand's cultural diversity and its constitutionally bicultural context (Ministry of Education 2011b). For this reason cultural diversity is one of the eight principles that underpin the *New Zealand National Curriculum* (Ministry of Education, 2007a). Because of the centrality of cultural issues these are addressed here as part of this introduction chapter. Cultural issues will be further commented on in the discussion chapter.

The Aotearoa New Zealand education system can be regarded as among the best in the world (Ministry of Education, 2011a). However, international evidence suggests that the system is continuing to fail some groups of students who remain at risk of underachievement (Ministry of Education, 2014). The need to address these systemic inequities within the system is a priority of the government of Aotearoa New Zealand. Priority learners are defined as "…groups of students who have been identified as historically not experiencing success in the New Zealand schooling system. These include many Māori and Pacific learners, those from low socio-economic backgrounds, and students with special education needs" (Education Review Office, 2012, p. 4).

A major challenge faced is the disparity in achievement between Pākehā students (new settlers, the descendants of the European colonizers) and Māori students (the indigenous first people of Aotearoa New Zealand) (Baskerville, 2009; Bishop, 2010 & 2012; Bishop, Berryman, Cavanagh & Teddy, 2009; Bishop, Berryman, Wearmouth & Peter, 2012; Bishop & Glynn, 1999; Bishop, Ladwig & Berryman, 2014; Lock & Gibson, 2008; Ministry of Education, 2009, 2011a & 2013a, 2014; Savage et al., 2011). The existence of educational disparities and other negative social indicators that adversely impact on indigenous students is one that many

nations around the world continue to face. In Aotearoa New Zealand these disparities have persisted over several decades, despite numerous government initiatives specifically targeted at reversing these trends, bridging the inequities and optimizing the untapped potential of Māori learners (Bishop et al., 2014).

In general, Māori students experience lower academic achievement, have higher rates of suspension and exclusion from school, are disproportionately represented in special and alternative education programmes, leave school earlier, and exit with fewer qualifications than Pākehā students (Bishop et al., 2009; Glynn & Macfarlane, 2002; Ministry of Education, 2013a; Savage et al., 2011). Alongside these educational disparities are social and economic disparities. When compared to the majority Pākehā population, Māori have lower incomes, experience higher levels of unemployment, have poorer health and a lower life expectancy, and have higher levels of incarceration (Bishop, 2012; Bishop et al., 2009; Bishop et al., 2012; Lock & Gibson, 2008).

The impact of Māori not achieving their potential is significant for students, their whānau (extended family), the wider community, and Aotearoa New Zealand as a whole (Ministry of Education, 2013a). Redressing these disparities becomes even more urgent when taking into account the reality that Māori are trending to becoming a larger proportion of the Aotearoa New Zealand population (Berryman, Kerr, Macfarlane, Penetito & Smith, 2012; Lock & Gibson, 2008).

A range of initiatives has been undertaken by the government, guided by the Crown's commitment to biculturalism and to upholding the principles of the Treaty of Waitangi, the founding document of Aotearoa New Zealand. The Treaty, signed by the Crown and Māori chiefs in 1840, remains central to Aotearoa New Zealand law, public policy, and the broader society. Through its three principles of partnership,

protection and participation, the Treaty promises protection of the interests (and the treasures) of Māori, as well as a mutually beneficial engagement by way of a power-sharing relationship between the two parties (Macfarlane, Glynn, Cavanagh, & Bateman, 2007). This has implications for educational policy with Māori having a right to expect the educational system to be responsive to culture and identity and to respect Māori cultural values and aspirations (Baskerville, 2009; Durie, 2005; Macfarlane, Glynn, Grace, Penetito, & Bateman, 2008; Ministry of Education, 2009).

Unfortunately, however, far from being characterized by a genuine partnership and power-sharing relationship, ongoing associations between the two Treaty partners have been characterized over the decades by the domination of Pākehā perspectives and processes (Durie, 1998). One of the consequences of this is that the education system that has failed significant numbers of Māori students and has negatively impacted on Māori culture and language (Moore, Anderson, Timperley, Glynn, Macfarlane, Brown, & Thomson, 1999; Macfarlane et al., 2007). These authors emphasise the importance of teachers striving for bicultural competence in order to improve intercultural relationships and support the creation of a culture of care in schools, to improve the quality of teaching pedagogy, and to increase the motivation of Māori students so as to strengthen participation and engagement, and thereby enhance learning outcomes. Some of the recent key strategic initiatives aimed at reducing educational disparities for Māori and upholding the Crown's educational commitments to raising Māori achievement include *Tātaiako: Cultural competencies for teachers of Māori learners* (Ministry of Education, 2011a), *Ka Hikitia: Managing for Success 2008-2012* (Ministry of Education, 2008a) and, more recently, *Ka Hikitia: Accelerating Success 2013-2017* (Ministry of Education, 2013a), as well as Te Kotahitanga (Bishop et al., 2009).

At the core of these initiatives is a commitment to supporting Māori to achieve educational success **as Māori** (Ministry of Education, 2008a, 2011a, 2013a). This is a commitment underpinned by recognition of the principles and practices of Kaupapa Māori philosophy and an assertion of the validity of Māori knowledge and understanding. Kaupapa Māori challenges the dominance of Pākehā knowledge and culture over Māori knowledge and culture and looks to the past for answers to the present and future educational developments for enhancing Māori learning outcomes. It affirms the Māori worldview and seeks to transform the unequal power relations that exist within Aotearoa New Zealand institutions and society that subordinate Māori aspirations (Pihama, Smith, Taki & Lee, 2004). There is a shift away from an emphasis on "Māori students being responsible for under-achieving … to look at how education can be delivered in the context of the vibrant contemporary Māori values and norms, reflecting the cultural milieu in which Māori students live" (Ministry of Education, 2011a, p. 3).

Tātaiako: Cultural competencies for teachers of Māori learners (Ministry of Education, 2011a) sets out the cultural competencies required by all teachers of Māori learners. These competencies focus on educators knowing, respecting and working with Māori learners and their whānau and communities and ensuring that Māori worldviews and aspirations are integral to the school community.

Ka Hikitia: Accelerating Success 2013-2017 (Ministry of Education, 2013a) is the Aotearoa New Zealand government's Māori educational strategy that succeeded *Ka Hikitia – Managing for Success 2008-2012* (Ministry of Education, 2008a). This strategy emphasizes the strong links between the well-being and achievement of Māori learners and asserts that well-being is supported by learners' sense of identity and their access and exposure to their culture. The strategy identifies quality teaching

as the most important influence on student achievement and stresses the need for effective teaching and learning relationships between teachers and students. The strategy is guided by five key principles. These include the application of the principles of Treaty of Waitangi to education by ensuring: Māori students achieve success as Māori; a Māori potential approach that recognizes the potential of Māori students to make valuable contributions to Aotearoa New Zealand; a two way teaching and learning process between teacher and student grounded in the principle of reciprocity, referred to as *Ako*; a recognition that culture, language and identity are important to well-being and central to enabling successful educational outcomes; and an understanding that productive partnerships between stakeholders in the educational process are essential and are based on mutual respect (Ministry of Education, 2013a).

Te Kotahitanga is an iterative research and professional development project designed to improve the educational achievement of Māori students in mainstream secondary schools in Aotearoa New Zealand (Bishop & Berryman, 2009; Macfarlane et al., 2007). The project began in 2001 when 70 Māori students and their families, along with their principals and teachers, were interviewed in an effort to capture their voices about the characteristics of teachers that make a difference to their learning. Based on their responses, the Effective Teaching Profile was generated and used as a basis for professional development (Bishop et al., 2009**)**. By listening to the voices of students and whānau and valuing their experiences and knowledge Māori were empowered as a part of the change process. This process is in keeping with the principles of Kaupapa Māori that seeks knowledge of the historically marginalized culture and promotes self-determination of participants within a power-sharing relationship of interdependence (Bishop, 2012; Bishop et al., 2009).

Fundamental to the profile is the call for teachers to develop a culturally responsive context for learning and to explicitly reject deficit thinking in relation to the reasons for Māori student underachievement. Teachers are supported instead to develop agentic thinking whereby they see themselves as possessing the skills to solve problems and to help Māori students to achieve success. In so doing teachers are seen as able to change learning relationships in the classroom (Bishop & Berryman, 2009; Bishop et al., 2009; Bishop et al., 2014; Savage et al., 2011). This is underpinned by interview evidence indicating that deficit thinking on the part of teachers was a significant barrier to student achievement and led to negative relationships between teachers and students (Bishop & Berryman, 2009). In addition, the Effective Teaching Profile outlines the actions of effective teachers of Māori learners. These include: caring for students as culturally located individuals; having high expectations of learners; managing classrooms flexibly so as to promote learning; engaging students in discursive learning interactions rather than focusing on transmitting knowledge; and seeing themselves as involved in a two-way teaching and learning interaction with students. Central to caring for students as culturally located individuals is the creation of whānau-type relationships and interactions between teachers, students and families (Bishop & Berryman, 2009).

Te Kotahitanga has been described as one of the most successful initiatives in the drive to raise the achievement of Māori students (Baskerville, 2009). Research indicates that participation, engagement, retention and academic achievement of students in schools implementing the Effective Teaching Profile have improved compared to a comparison group of schools (Bishop, 2010, 2012; Bishop et al., 2012). Bishop et al. (2014) found that teachers' embracing the Māori concept of Whanaungatanga, central to *Tātaiako* competencies, and the Effective Teaching

Profile, was pivotal in the eyes of students. Whanaungatanga has been described as a concept that is key to understanding the Māori worldview and establishing culturally safe schools (Macfarlane, 2004; Macfarlane et al., 2007) and involves a process of establishing respectful working relationships with Māori learners, parents, whānau and communities (Bishop et al., 2014; Macfarlane, 2004; Macfarlane et al., 2007; Ministry of Education 2011a).

Despite the implementation of the Effective Teaching Profile having a positive impact on the achievement of Māori students generally, schools have been found to vary considerably in terms of how effectively they were able to implement the practices, as well as how effectively they were able to sustain benefits for students once external funding and support were withdrawn (Bishop et al., 2012). Independent research confirmed that not all schools succeeded in creating culturally responsive learning environments, despite the best efforts of their teachers, and that all educators continued to have a role to play in ensuring that school reforms supported Māori students to achieve success (Savage et al., 2011).

As indicated above, in addition to the low levels of achievement experienced by many Māori students, evidence suggests that the educational system in Aotearoa New Zealand is also failing to meet the needs of other groups of learners within the context of an increasingly diverse society. Outcomes for Pasifika students, students from low socio-economic backgrounds and students with special education needs are also unacceptably poor by international standards. Improving outcomes for all of these learners continues to be a government priority (Education Review Office, 2012; Ministry of Education, 2015).

Pasifika communities made up 7% of the population of Aotearoa New Zealand in 2013 and as such have an important presence in society. However, Pasifika learners

experience disparities in literacy and numeracy achievement when compared to learners from other ethnic groups (Ministry of Education, 2015). In addition, indicators of student engagement in education, for example rates of absence and truancy, are substantially higher among Pasifika learners compared to learners in the general school population. Pasifika students also had the highest rates of expulsion from secondary schools in 2013 and have the lowest rate of achievement against the Aotearoa New Zealand National Standards (Ministry of Education, 2015). It is within this context that the *Pasifika Education Plan 2013-2017* was launched as a key strategy in the drive to improve outcomes for Pasifika students. This document seeks to promote personal responsibility and collective accountability as it aims to lift achievement (Ministry of Education, 2013b).

As is the case with raising the achievement of Māori students, a key role of RTLB, as collaborative consultants, is to work in culturally responsive ways that lift the achievement of Pasifika learners (Ministry of Education, 2011b). In so doing the need to recognize that Pasifika students come from a number of Pacific islands each with their own cultural identity is highlighted and the importance of programmes needing to be responsive to the particular culture of each student is emphasized (Ministry of Education, 2011b).

In addition to working effectively with Māori and Pasifika learners, it is also important to recognize the many different cultures and ethnicities that exist in Aotearoa New Zealand and the need to work effectively with all groups of learners (Ministry of Education, 2011b).

Resource Teachers Learning and Behaviour in Aotearoa New Zealand

The concept and practice of inclusive education has gained importance in educational systems internationally and is considered central to the achievement of high quality

education for all learners (UNESCO, 2009). In keeping with this international trend, working with teachers to raise student achievement for diverse learners within an inclusive educational system is a key national priority in Aotearoa New Zealand (Ministry of Education Website, 2012; Education Review Office, 2004; 2013; 2015). This is a challenging task as the movement towards an inclusive educational system involves fundamental change on the part of teachers and school systems. A key focus of this process is on implementing an ecological approach to working with students and to developing practices and systems that support the needs of diverse students within the inclusive setting. This constitutes a move away from a more traditional functional limitations approach to special education focused on the diagnosis of deficiencies within some students and the remediation of those deficiencies (Moore et al., 1999; Urton, Wilbert & Hennemann, 2014). As educationalists seek to meet the challenges of developing more inclusive education systems it is important to understand the role of teacher efficacy in this process.

Bandura (1994) defined self-efficacy as people's beliefs about their capacity to produce levels of performance that allow them to influence events that affect their lives. In the context of education teacher efficacy is an important construct in student achievement and in teachers' ability to successfully manage educational reform. It may be defined as teachers' belief that they can positively influence the achievement of students even when those students are difficult to teach (Savolainen, Engelbrecht, Nel & Malinen, 2012; Tschannen-Morgan, Hoy & Hoy 1998). Teachers with high levels of self-efficacy believe that they have the capacity to strongly influence student achievement and are more open to new ideas. However, managing change may be difficult and stressful, so during times of educational change teacher self-efficacy may be lowered. It is therefore important that teachers and schools are well supported so

that high levels of self-efficacy can be maintained among staff if new inclusive strategies are to be successfully implemented (Tschannen-Morgan, Hoy & Hoy 1998; Urton, Wilbert & Hennemann, 2014).

The RTLB service was created as part of the government's special education policy, *Special Education 2000* (SE 2000) in order to assist teachers in the change processes involved in improving outcomes for students within inclusive contexts. *SE 2000* was designed to achieve the government's goal of creating, "a world class inclusive education system that provides learning opportunities of equal quality to all students" (Ministry of Education, 1996, p.5). This policy incorporated the Special Education Policy Guidelines that addressed the responsibilities of early childhood services, schools and agencies in relation to learners with special education needs. The policy was intended to support schools to take ownership of meeting the needs of students with special education needs (Brown, 1997; Greaves, 2003). It outlined strategies for funding, for example, through the Special Education Grants paid to all schools aimed at supporting students with moderate special education needs. The aim of the policy was to help ensure clear and equitable resourcing for students with special education needs across the country (Creech, 1997). In addition SE 2000 promised "information, education and specialist advisory support to assist families, schools and teachers achieve the best possible learning environment for all students with special education needs" (Brown, 1997, p. 148). The policy did not define what was meant by inclusion or an inclusive education system (Moore et al. 1999; Thomson et al. 2003) and, ironically, it has been argued that an emphasis on funding rather than on professional practice in SE 2000 has led to a focus on categorizing students in order to secure funding thereby undermining inclusive approaches in education (Coleman, 2011).

The quality of the teacher in the classroom is widely regarded a critical factor in determining the success of an education system and the achievement of students (Carnoy, 1999; Erickson, Noonan & McCall, 2012; Fishman, Konstantopoulos, Kubitskey, Vath, Park, Johnson, & Edelson, 2013; Hattie, 2009; Lambe, McNair, & Smith, 2013; Malinen, Vaisanen & Savolainen, 2012; Ministry of Education, 2013a; Thomson, 2004). With classroom teachers continuing to report not feeling well prepared for working with diverse students in inclusive settings, the importance of teacher education is well recognised (Smith & Tyler, 2011). The unique role of RTLB in supporting the training and practice of classroom teachers within inclusive contexts is considered pivotal to the successful implementation of *SE 2000* (Education Review Office, 2004; Ministry of Education, 1996 & 2011b; Thomson, 2013; Thomson, Brown, Jones, & Manins, 2000; Thomson et al., 2003).

When the RTLB service was established in 1998, five hundred special education teachers who were already working in schools in Aotearoa New Zealand were employed as RTLB, together with an additional 250 teachers who were specifically recruited for the role. These numbers ensured that a ratio of one RTLB to every 750 students could be maintained so that all schools in Aotearoa New Zealand could have ready access to the service (Brown, Thomson, Anderson, Moore, Glynn, Macfarlane, … Ysseldyke, 2000). RTLB were to work as itinerant consulting teachers in clusters of schools and to act as a resource for schools. Their support was targeted at the 5 – 6% of the student population in Years 1-10 experiencing mild to moderate learning or behavioural difficulties and the teachers of these students. RTLB were also to work with teachers using a collaborative problem-solving approach. These specialists were to be agents of change supporting the development of appropriate strategies to meet the needs of diverse students and providing training for teachers

(Education Review Office, 2004; Thomson, 2013; Thomson et al., 2003; Walker, 2013).

A very important aspect of RTLB work would be their work to support Māori students and their communities. As discussed earlier these students experienced disproportionately low levels of achievement. They were therefore overrepresented on the RTLB roll making up a third of that roll despite constituting only 20 percent of the general student population. In addition, although Māori were over-represented as clients, comparatively few RTLB were Māori themselves (Glynn & Macfarlane, 2002; Education Review Office, 2004). With evidence suggesting persistent trends for disproportionately lower levels of achievement among Māori learners (Education Review Office, 2012; Ministry of Education, 2008b; 2014; 2015), a strong emphasis on raising the achievement of Māori learners continues to a priority of RTLB practice (Ministry of Education, 2011b).

At the core of the transformation from the role of special education teacher to RTLB was a shift in thinking. In order to realize the inclusive vision of the policy, it was considered necessary for practitioners to move away from the traditionally dominant functional limitations or deficit perspective and to embrace an ecological perspective. Whereas the traditional functional limitations paradigm is based on the assumption that the major problems facing people with disabilities result from deficits within those persons, the ecological paradigm posits that the primary issues which these people face are external. The task of schools, therefore, is to alter school environments to meet the needs of students rather than to remediate their perceived deficits. Substantial system changes were required in order to make this shift (Moore et al., 1999; Thomson, 2013; Thomson et al., 2000; Walker, 2013).

The level of government commitment to the RTLB initiative was such that a

substantial financial investment has been made in the service. By 2009, $57.2 million per annum was allocated to the service (Education Review Office, 2009) and from the outset provision was made to ensure that professional development, by way of a postgraduate qualification, was put in place so that these specialists were properly prepared for their role (Thomson et al., 2003).

Training of Resource Teachers Learning and Behaviour

The first Training Programme for RTLB

Three universities in Aotearoa New Zealand, Victoria, Waikato and Auckland, collaborated to provide training for RTLB from the beginning of the service in 1998 until 2010. At the core of the training programme was a commitment to following an ecological model that valued inclusion and honoured the Treaty of Waitangi, with Māori dimensions integrated throughout all four courses of the programme. Ensuring that the programme prepared RTLB to provide effective support to teachers of Māori students was an important aim (Glynn & Macfarlane, 2002). The programme also stressed a collaborative consultative model of problem solving and reflection on professional practice. It was delivered using a combination of block courses and distance learning with most assignments being emailed (Thomson et al., 2003). Following this first training programme two studies relevant to the work of RTLB were carried out. These are described in the following paragraphs.

A small-scale study (Thomson, 2013) involving six particularly experienced and knowledgeable RTLB and 14 teachers with whom these RTLB worked, found that most teachers (12 out of 14) expressed satisfaction with the service provided by RTLB and considered that RTLB effectively used a problem-solving collaborative approach to enskill teachers. Teachers who worked alongside these RTLB considered that they were able to implement appropriate strategies with the support of RTLB that

they might not have been able to implement on their own and that they were then able to incorporate these strategies into their teaching repertoire.

Results of this study suggest that the nature of the relationship established between the RTLB participants and the teachers with whom they worked was critical in the effectiveness of interventions implemented. Teachers valued the supportive nature of their relationship with RTLB and their collaborative team approach, as well as their assistance and expertise in the implementation of programmes. Where there was a breakdown in communication between RTLB and teachers, the success of interventions was compromised. Thomson (2013, p. 885) emphasises that a "…critical element in the success of the RTLB role, [therefore,] is the classroom teacher. RTLB may have the required expertise, but unless the expertise can be utilized effectively by the teacher, nothing will change."

A further small-scale study, conducted by Walker (2013) concluded that RTLB were able to successfully transfer knowledge gained in the university preparation programme devised by Victoria, Waikato and Auckland universities to practice in schools. Central to the professional training programme was a focus on the implementation of a collaborative problem-solving model in RTLB practice. RTLB graduates were able to use this collaborative model effectively in their work to support teacher learning – a factor important in building school capacity and enabling the work of RTLB to be sustained beyond the time scale of their interventions. Walker (2013) identified a range of factors critical to the successful implementation of the collaborative problem-solving approach. These included: RTLB skills in building positive, respectful professional relationships with teachers; RTLB professional knowledge; the extent to which senior leaders understood and supported the work of RTLB; and, the close alignment between the RTLB training programme

and what was expected of them in their role as identified in policy documents. Although RTLB were typically competent in their role, professional development providers also noted that some RTLB on the training programme may not have been suited to the RTLB role and did not apply the collaborative problem-solving model in their work as was intended (Walker, 2013).

The Transformation of the RTLB service

Following two Education Review Office (ERO) reviews of the RTLB service that concluded that there were persistent inconsistencies in RTLB practice (2004 & 2009), the transformation of the service began (Ministry of Education, 2011c). Although there was found to be good practice in some RTLB clusters, this was not consistent throughout Aotearoa New Zealand. The aim of the restructuring undertaken was to ensure the delivery of a more effective and consistent service. Two groups were set up whose work would inform the transformation. These were the Principals' Working Group, that would consider issues relevant to the management of the service and the Practitioners Working Group that would design the practice model for RTLB (Ministry of Education, 2011c; Vause, 2011). As a result of transformation the RTLB service now has fewer clusters and the leadership of and support for RTLB has been strengthened (Ministry of Education, 2012). In addition, one of the outcomes important for the practice of RTLB was the updating of the *RTLB Toolkit* (Ministry of Education, 2011b).

The revised toolkit sets out a clear ten-step, problem-solving, practice sequence that RTLB are expected to follow when working with schools. This process starts with the referral to the service and the initial meeting and moves on to the data gathering, analysis, goal setting and planning stages. The next stages involve the intervention, monitoring and post data collection, with the sequence finishing with a

review and closure of the case. The guidelines make it clear that these steps may not always be followed in the same order.

Underpinning the work of RTLB are seven key principles. These are: inclusive teaching; culturally responsive practice; an ecological approach to support; a collaborative and seamless model of service; strengths based practice; reflective practice; and evidence-based practice. The importance of RTLB having excellent knowledge of effective teaching strategies and keeping students' needs and achievement at the centre of their practice is also highlighted.

Post Graduate Diploma in Specialist Teaching

Although the focus of the 2009 ERO review that helped to inform the transformation of the RTLB service was on the RTLB management and governance model, one of the recommendations made by the Review Office was to reassess the professional development of RTLB in order to ensure that the training was relevant to their work (Education Review Office, 2009). When bids from various institutions to provide specialist training were being considered by the Ministry of Education, attention was paid to establishing "more rigorous training requirements and a competency framework" (Ministry of Education Website, 2012). The Ministry sought a qualification framework that would build common core competencies across the specialist teaching workforce with the intention of strengthening cohesion across this workforce and taking advantage of economies of scale (Bevan-Brown et al., 2010). The contract was won by University of Canterbury and Massey University in a collaborative bid that saw the introduction of the Post Graduate Diploma in Specialist Teaching (PGDipST) in Aotearoa New Zealand in 2011.

The programme encompassed endorsements in five specialist areas of study. These specialist areas were: Autism Spectrum Disorder, Blind and Vision Impairment, Early Intervention, Deaf and Hearing Impairment, and Learning and Behaviour endorsements. In each of these endorsement areas students were required to complete four courses, one of which was a compulsory core course. The RTLB training programme was the PGDipST Learning and Behaviour (L&B) endorsement. This endorsement programme is the subject of the study reported in this thesis. As was the case with the previous RTLB training, all new RTLB appointed in Aotearoa New Zealand are required to successfully complete the training programme as part of their employment contract.

During planning of the programme lists of competencies were devised by specialist staff from Massey and Canterbury universities taking account of information gained from: a national survey of stakeholders in the community; consultation with the Ministry of Education; extensive advisory group consultation, including an advisory group for each endorsement, a Māori reference group and an international advisory group (Bevan-Brown et al., 2010). Key documents, for example, *The Registered Teacher Criteria* (New Zealand Teachers Council, 2010), *Tātaiako: Cultural competencies for teachers of Māori learners* (Ministry of Education, 2011a) and CEC Standards (Council for Exceptional Children, 2008) were also taken into account. Competencies were organized into competency domains and course content developed to address those competencies. As was the case with the prior training programme, a decision was made to ensure that Māori cultural values and issues permeated all four courses of the programme, rather that being addressed in one course designated to these issues. This approach was adopted in order to

encourage students to view cultural issues as integral to all aspects of their study and practice.

The programme employed a blended community of inquiry and inter-professional practice approach (Bevan-Brown et al., 2010). Participants were required to attend two one-week face-to-face block sessions per year and to participate in online learning over the two-year duration of the programme. Students were encouraged to learn with, from and about each other's specialist areas and to collaborate both within and across specialist disciplines. A Moodle-based e-learning site was used as the learning platform for the programme. This platform enabled a number of applications that included, for example, quizzes, discussion forums, noticeboards, electronic media such as online video and assignment submission and marking. E-portfolios were created for assignments and for use as ongoing professional practice documents.

The four courses of the Post Graduate Diploma in Specialist Teaching (Learning & Behaviour)

The PGDipST (L&B) programme aims to support RTLB to develop the competencies they need to work effectively with teachers, schools and students as agents of change, thereby improving outcomes for learners. The four courses of the PGDipST (L&B) addressed 51 competencies and were delivered over a period of two years of part-time study. The courses were: Theory and Foundations of Learning and Behaviour Diversity (L&B); Core Theory and Foundations of Specialist Teaching (Core); Evidence-Based Inter-professional Practice (EBIP); and, Practicum for Learning and Behaviour (Practicum). The competencies for each of the four courses are set out in Appendix A.

The L&B course was completed in the first year of study and was the course specifically focused on the work of RTLB. This course was an advanced study of the theoretical and research-based foundations related to understanding, assessing and providing for learners who have special needs in the area of learning and behavior. L&B course content was organized into six competency domain areas. These were concerned with: the nature of learning and behavior diversity, individual evidence-based assessment and intervention, small group evidence-based assessment and intervention, whole class evidence-based assessment and intervention, school wide evidence-based systems and interventions, and effective RTLB practice. The course comprised ten competencies (see Appendix A).

An example of one of the assignments designed to meet the competencies for the L&B course was a literature review and professional development assignment. In part one of this assignment students were asked to select a topic relevant to their work and to conduct a review of the literature on that topic. Part two of the assignment required students to prepare resources for a professional development workshop or series of workshops based on their researched topic. The workshop(s) were to be aimed at a group of teachers and/or other professionals. Materials prepared were to include: a professional quality power point presentation accompanied by notes enabling course tutors to gain a full picture of the presentation; details of workshop participant activities; and, a handout that participants could take away with them. The assignment did not require students to conduct the workshop.

The Core course was compulsory for students in all of the five endorsements of the PGDipST programme. The course, also completed in the first year of study, was an advanced study of generic core theory relevant to professionals working in all endorsement areas. Core course content was divided into six competency domains or

areas of study. These were: professional knowledge, assessment practice, evidence-based practice, inter-professional practice, cultural responsiveness, and reflective and ethical practice. The course comprised 20 competencies (see Appendix A).

An example of an assignment designed to meet the competencies of the core course was the compilation of a professional portfolio of work. This portfolio comprised four sections. To meet the requirements for section one of the assignment students developed and presented an individual learning plan for the course. This plan was to include their learning goals for each of the six competency domains. Goals were to be linked to course competencies and to specific measurable outcomes. In section two students presented artefacts relevant to their goals together with reflections on those artefacts. Section three required students to summarise their progress in relation to goals; outline the enablers of and barriers to their progress; and, consider the future directions for their learning. In the final section of this assignment students were asked to discuss their professional philosophy as specialist teachers.

The EBIP course was completed in the second year of study and focused on an examination of evidence-based practices and professional practices of specialist teachers. This course was divided into three domains or areas of study. The first two domains – one on evidence-based practice and the second on inter-professional practice, were generic and completed by students in all five of the endorsement areas of the programme. The generic nature of these first two domains enabled students to work collaboratively across endorsement areas on a collaborative consultation and partnership project. In the third domain students applied what they had learned in the generic domains to their practice as learning and behavior specialists. The course comprised eight competencies (see Appendix A).

An example of an assignment designed to meet the competencies of the EBIP course was a principles and practice assignment. This assignment required students to select one of the seven principles of RTLB practice as outlined in the *RTLB Toolkit* (Ministry of Education, 2011b). Students were required to: provide a critical analysis of the literature and evidence that underpinned their selected principle and to provide a critique of one example of their use of this principle in practice, making the links between theory and practice explicit.

The Practicum course was also completed in the second year of study and was situated in the professional practice of students and in their RTLB casework. Students were supported in this practicum by course tutors, mentors in the field of specialist teaching and peers who were also undertaking the programme. Following reflection on their practice students planned learning activities to meet their learning needs and goals in line with RTLB indicators developed from the New Zealand Registered Teacher Criteria. The practicum course comprised seven competency domains. These focused on: professional, reflective and ethical practice; cultural responsiveness; professional knowledge and ongoing professional development; inter-professional practice; evidence-based assessment; evidence-based instruction and strategies; and RTLB case management. The course comprised 13 competencies (see Appendix A).

The first assignment of the Practicum course involved the planning of the practicum experience. For each of the competencies of this course students were asked to select two relevant indicators taken from the *RTLB Indicators for Registered Teacher Criteria document* (RTLB Association, 2011). For each of the selected indicators students were then asked to: reflect on and review their practice in relation to the indicator; set goals to take their practice forward; plan experiences that would enable them to meet goals and consider how they might provide evidence to show

how goals had been met. Students were also require to gain feedback about their plan from other professionals in the field; to provide a description of the resources that they planned to use and to discuss the opportunities and challenges that they anticipated in the implementation of the plan.

The 51 competencies included in the four courses of the programme can be grouped into five overall themes or clusters. These are: assessment and intervention; collaboration and consultation; cultural responsiveness; professional and ethical practice, legislation, policy and curriculum documents; and professional development, human development and learning issues. Competencies throughout the programme are underpinned by the guiding principles of RTLB practice as outlined in the *RTLB Toolkit* (Ministry of Education, 2011b) in order to support RTLB to fulfill the expectations of their role and to implement effective interventions and programmes. In the following pages the tables 1.1 to 1.5 present the competencies in these five clusters and indicate which course addressed each competency.

Table 1.1. Assessment and Intervention Competencies

Competencies – Cluster 1 – Assessment and Intervention	**Course**
Demonstrate an understanding of the nature and extent of learning and behaviour difficulties and interventions to meet the needs of students who experience difficulties with learning and behaviour.	L&B
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate individual assessments and interventions for students who experience difficulties with learning and behaviour.	L&B
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate small group assessments and interventions for addressing learning and behaviour difficulties.	L&B
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate whole class assessments and interventions for addressing learning and behaviour difficulties.	L&B
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate school-wide systems and interventions for addressing learning and behavior difficulties.	L&B
Demonstrate knowledge of evidence-based and effective teaching/learning practices.	Core
Critically evaluate resources and intervention strategies.	Core
Critically discuss and evaluate curriculum and programme adaptations and solution/ strengths-based interventions.	Core
Demonstrate knowledge of assessment models and practices.	Core
Critically evaluate assessment approaches and tools.	Core
Discuss and compare assessments practices across specialist areas.	Core
Identify and critically analyse evidence-based practices in the area of learning and behaviour including special and inclusive education.	EBIP
Conceptualise plan and implement an appropriate learning programme.	Prac
Gather, analyse and appropriately use, assessment information which has been gathered formally and informally.	Prac

Table 1.2. Collaboration and Consultation Competencies

Competencies – cluster 2 – Collaboration & Consultation	**Course**
Demonstrate understanding of inter-personal competencies needed for working effectively with parents, whānau, teachers, other school staff and professionals not based in schools.	L&B
Demonstrate an understanding of the concept of teacher learning and the knowledge and skills for assisting teachers and principals to create positive learning environments.	L&B
Demonstrate knowledge of collaborative and consultative models of working and strengthening partnerships.	Core
Share professional knowledge and skills to learn with, from and about specialist areas.	Core
Reflect on and contribute to communities of learning and practice.	Core
Demonstrate knowledge and understanding of principles and practices of learning with from and about other specialist areas.	EBIP
Critically discuss the values, skills and attitudes needed for inter-professional practice	EBIP
Collaborate on an inter-professional case study.	EBIP
Critically reflect on issues relating to forming partnerships with professionals and stakeholders.	EBIP
Show leadership that contributes to effective teaching and learning.	Prac
Establish and maintain effective professional relationships focused on the learning and well being of ākonga.	Prac

Table 1.3. Cultural Responsiveness Competencies

Competencies – cluster 3 – Cultural Responsiveness	**Course**
Demonstrate an understanding of Kaupapa Māori - Thinking and theorising.	L&B
Demonstrate an understanding of the concept and role of culture.	Core
Reflect on own cultural values, practices and beliefs.	Core
Critique the influence of the majority culture on the Aotearoa New Zealand education system.	Core
Demonstrate an understanding of the concepts of biculturalism and multiculturalism.	Core
Critically discuss and apply Māori and multicultural concepts and practices across Specialist Teaching areas.	EBIP
Demonstrate a commitment to bicultural partnership in Aotearoa New Zealand.	Prac
Respond effectively to the diverse language and cultural experiences, and the varied strengths, interests and needs of individuals and groups of ākonga.	Prac
Work effectively with the bicultural context of Aotearoa New Zealand.	Prac

Table 1.4. Professional and Ethical Practice and Legislation, Policy and Curriculum Competencies

Competencies – cluster 4 – Professional and Ethical practice and Legislation, Policy and Curriculum issues	**Course**
Demonstrate an understanding of the RTLB role and its links to other learning and behavior initiatives.	L&B
Demonstrate knowledge and skills in developing, delivering and evaluating RTLB operational processes.	L&B
Demonstrate knowledge and skills in becoming an ethical and reflective practitioner.	Core
Demonstrate knowledge and skills in using the code of ethical practice for various Specialist Teaching areas (eg Teachers Council Ethical Guidelines).	Core
Critically discuss legislation, policy and curriculum documents across Specialist Teaching areas.	Core
Critically review historical and current perspectives on special and inclusive education, disability and diversity.	Core
Consult, collaborate and reflect on IEP or equivalent across specialist areas.	Core
Understand and apply evidence-based frameworks relating to inclusion.	EBIP
Demonstrate a commitment to sustainable practice.	EBIP
Demonstrate a commitment to promoting the well-being of all ākonga.	Prac
Promote a collaborative, inclusive and supportive learning environment.	Prac
Maintain effective record keeping systems.	Prac

Table 1.5. Professional Development, Human Development and Learning Theory Competencies

Competencies – cluster 5 – Professional Development, Human Development and Learning Theory	**Paper**
Demonstrate knowledge of human development and learning theories.	Core
Consult and collaborate on inter-professional implications of theories of learning and development.	Core
Demonstrate in practice, knowledge and understanding of how ākonga learn.	Prac
Demonstrate a commitment to ongoing professional learning and development of personal professional practice.	Prac
Use critical inquiry and problem solving effectively in professional practice.	Prac

Reflecting on the Post Graduate Diploma in Specialist Teaching

Programmes in the area of general and special education training should be subject to a validation process (Dingle, Falvey, Givner, & Haager, 2004) by professionals in the field. International standards make it clear that education professionals have an ethical responsibility to, 'initiate, support and/or participate in research … with the aim of improving the quality of educational services, increasing the accountability of programs, and generally benefiting persons with exceptionalities…' (Council for Exceptional Children, 2008, p. 4). Research activities are integral to a competency-based programme (Tuxworth, 1989) and critical to meeting the needs of students (Rakap, Jones & Emery, 2014). In keeping with this responsibility to ensure that the needs of students are met, there has been an ongoing commitment to the collection of data related to the PGDipST.

An online questionnaire survey was conducted at the end of 2011, the main purpose of which was "to investigate the overall programme with emphasis on the core and specialist papers and students changing levels of confidence/competence with programme tasks and skills." (Meredith, 2012, Appendix 7 p.1). Results suggested that there were high levels of satisfaction among participants who largely considered the programme to be relevant and worthwhile, although some issues around workload were raised. In addition, at the end of 2011, Learning and Behaviour Diversity course coordinators asked students to complete a short online questionnaire about their experiences related to this course. Again, feedback was generally positive. Many students considered that there was a good balance of theory and practice issues covered and activities and exercises were relevant (Kearney & Hornby, 2012).

In neither of these two investigations, however, were data collected specifically with regard to the prescribed competencies of the PGDipST (L&B)

programme. With the large investment made by the Aotearoa New Zealand government in the RTLB service and in the training programme designed to enable professionals to develop the necessary competencies, it is considered important that research is undertaken which focuses on these competencies.

The importance of competencies in the effective practice of professionals in the field of special educational needs has long been acknowledged (DeFur & Taymans, 1995; Herr, Algozzine & Heuchert, 1976; Professional & Teacher Development Task Force, 2004). It is therefore critical that competencies addressed in teacher education programmes are rigorously selected (Sullivan, 1995) so that their effective deployment empowers teachers to perform professionally in complex situations in the field (Malinen et al., 2012). The 51 competencies of the PGDipST (L&B) programme are fundamental as it is around these that the content in all four courses of the programme was developed. Seeking the views of teachers about these competencies should yield important insights and shed light on how programmes can be improved (Conderman, Johnston-Rodriguez, Hartman & Walker, 2013; Heller, Fredrick, Dykes, Best, & Cohen, 1999; Lombardi & Hunka, 2001). It is in this context that the study reported here has been carried out.

The current study therefore aimed to specifically examine the perceptions of students enrolled in the L&B endorsement with particular reference to the 51 prescribed course competencies. The research questions addressed in this study were:

1. To what extent did participants consider that programme competencies were important to their professional work?
2. To what extent did participants consider that the programme enabled them to develop prescribed competencies?
3. What did participants consider to be the facilitating factors in and barriers to

competency development?

The decision to focus this study on the perceptions of students enrolled in the programme rather than on examining the views of a wider group of stakeholders was taken in order to honour the voices of programme participants and to value the contributions that they could make to programme development, as highlighted by Conderman et al. (2013). It was considered that the extensive national survey conducted during the planning stages of the programme (referred to on page 20 above) had given a wide range of stakeholders the opportunity to have an input into the development of programme competencies. In addition, regular advisory group meetings enabled stakeholders to have ongoing opportunities to reflect on the programme with a view to its continued development. It was also taken into account that programme staff had been able to avail themselves of numerous opportunities to consult with each other about the programme through regularly scheduled face-to-face meetings, Skype meetings, email correspondence and telephone calls. Although students were given the opportunity to participate in end of year programme feedback surveys, it was considered important to provide a more formal and comprehensive opportunity to capture student voice and to honour the reflections of this group of graduates.

In the following chapters a review of literature relevant to the study is first presented. This is followed by an outline of the methodology employed in the study. Next the results of the study are described and, in the final chapter, a discussion of those results is presented.

The literature review in chapter two focuses on the role of competencies in teacher training, the principles that underpin adult learning, and the implications of utilizing e-learning platforms to deliver teacher training programmes. Chapter three

describes the mixed-method sequential design employed in the study that comprised a questionnaire survey followed by six focus group interviews. In chapter four the results of both the quantitative and qualitative data analysis are presented in answer to the three research questions of the study. Chapter five discusses the findings of the study relevant to participants' perceptions of the importance of programme competencies to their work; the extent to which they were enabled to develop these competencies in the programme; and, the range of factors they perceived acted as enablers of or barriers to competency development. In this final chapter the implications of the study for practice are also discussed, its limitations outlined, and recommendations for future practice made.

CHAPTER TWO: LITERATURE REVIEW

"Teacher educators must worry about not only what to teach but also how, so that knowledge for teaching actually shapes teachers' practice and enables them to become adaptive experts who can continue to learn" (Darling-Hammond, 2006, p. 6).

The aim of this chapter is to provide an underpinning theoretical rationale for a research study evaluating graduates views of the competencies taught in the Learning and Behaviour (L&B) endorsement of the Post Graduate Diploma in Specialist Teaching (PGDipST). The study focuses on the extent to which participants considered that the competencies taught were important to their work as practitioners and the extent to which participants considered themselves to have been enabled to develop these competencies.

The chapter starts by establishing what is meant by competencies and discussing the role that they play in the teacher education context. In so doing, the behavioural roots of competency-based training are examined. The rationale for and advantages of focusing on competencies in training programmes are elaborated on. Next, the role of teaching 'standards' in providing a framework for educationalists to define their work and for training institutions to develop programme competencies is discussed. Literature specific to competencies required in the field of special educational needs (SEN) is then examined along with internationally influential special needs standards.

Since the PGDipST programme is concerned with adult learners, and issues relevant to adult learning will inform the findings of the study, these issues are discussed. Finally, because the competencies under review in the study are addressed

within an e-learning framework, the e-learning context relevant to the study is examined.

Competencies in Education and Training Programmes

A range of definitions of competencies can be found in the literature (Gangani, McLean & Braden, 2006). Tuxworth (1989) points to the relevance of criteria published by the National Consortium of Competency Based Education Centers in the US which stated that competency statements should describe "… outcomes expected from the performance of professionally related functions, or those knowledges, skills and attitudes thought to be essential to the performance of those functions" (Tuxworth, 1989, p. 13). More recently teacher competencies were defined as, "… a dynamic combination of knowledge, skills, attitudes, values and personal characteristics that empower teachers to act professionally and appropriately in a situation, and are deployed in a coherent way" (Malinen et al., 2012, p. 576). Other definitions include those that stress links with successful job performance (Ergul, Baydik & Demir, 2013; Gangani et al., 2006; Struyven & De Meyst, 2010).

Competency frameworks play an integral part in human resource management and professional training within both the private and public sectors (Gangani et al., 2006). They are widely used in education contexts (Dardig & Moyer, 1979; Struyven & De Meyst, 2010). Their use was driven "… by strong political impetus…" (Kerka, 1998, p. 1) in order to ensure that education and training were relevant to the needs of communities and that the work force was well prepared for the current competitive and global economy. By the 1960's calls were increasingly being made for more accountability in education (Struyven & De Meyst, 2010; Tuxworth, 1989) and in 1968 the US Office of Education gave grants to colleges and universities to develop

training programmes with precise specifications of competencies to be learned (Tuxworth, 1989). This triggered the trend in higher education institutions towards developing competency-based educational programmes. These programmes have typically emphasized what individuals knew and could do within their working context (Struyven & De Meyst, 2010).

Behavioural Roots

In the USA, the origins of competency-based training can be traced back to the training programmes undertaken by the American Defense Force in the 1950's. It was believed that a thorough analysis of the behaviours of a competent performer would reveal a standardized learning sequence that could then be taught to new learners and, in so doing, competent performance could be achieved across the work force (Pitman, Bell, & Fyfe, 1999). Often competencies focused on specific, observable and measurable behaviours (Kerka, 1998; Struyven & De Meyst, 2010). Such a narrow behavioural approach to competencies has, however, been criticized by those who have argued that competent performance is more than the sum of its component parts (Kerka, 1998; Tuxworth, 1989). With the use of competencies in a range of very complex situations a holistic view of competencies is required in order to achieve meaningful learning (Mansfield, 1989; Struyven & De Meyst, 2010).

Advantages of a Competency-Based Approach

A competency-based approach offers a range of advantages. As indicated above, competencies can provide a pathway to increase the correspondence between what employers need their employees to do in their working environment and what is provided through education and training programmes. Moreover, a competency-based approach outlines as clearly as possible what is to be achieved and how this achievement can be measured. In addition, the value of competencies in giving

professionals a common language and framework cannot be underestimated as it encourages a better understanding and articulation of what is required in the work context (Murray, 2009). In relation to the teaching profession, establishing competencies demystifies the profession for the general public as well as makes the role of the teacher clearer for schools and for teacher training institutions (Stuyven & Meyst, 2010).

The careful selection of competencies is critical in competency-based education (Sullivan, 1995) and has received increasing attention in teacher training programmes (Ergul et al., 2013). In the climate of dissatisfaction with teacher training in which competency-based education and training emerged in the 1960's there was a focus on ensuring that only competent teachers were allowed to enter the teaching profession and that their certification was dependent on verifying their competencies (Tuxworth, 1989).

Teacher Standards

Standards can play a pivotal role in providing guidance to the teaching profession about the competencies needed for teachers to be effective practitioners and can fulfill two important functions. Firstly, standards can establish what is most desirable to achieve in professional practice with the aim of protecting and enhancing the quality of teaching and learning. Well-written standards can form a bridge between research and practice and articulate what research implies. They can shape the content of teacher education courses and provide a basis for developing competencies for preparation programmes (Kleinhenz & Ingvarson, 2007). Standards also provide a mechanism for accountability and can enable teachers, educational authorities and stakeholders to measure professional performance. Information gleaned can then be

used to support the on-going learning and professional development of teachers. In many countries including, for example, Australia, Aotearoa New Zealand and the USA, standards are used in this way and they set out what can be expected of teachers in order for them to be effective professionals at various stages of their careers (Kleinhenz, & Ingvarson, 2007).

In Aotearoa New Zealand the *Graduating Teacher Standards* (New Zealand Teachers Council, 2007) outline the standards that new graduates are required to meet in terms of professional knowledge, professional practice, professional values and relationships. Teacher education providers are required to ensure that all students graduating from their programmes meet those standards. *The Registered Teacher Criteria* (New Zealand Teachers Council, 2010) are designed to specify the standards that all teachers are required to meet (including RTLB) in order to gain full teacher registration in Aotearoa New Zealand. They are also intended as a framework to guide the on-going professional learning of all teachers and to support teacher development at every stage of their career. There are 12 criteria. Five of these relate to professional relationships and professional values, while seven relate to professional knowledge in practice. The New Zealand Teachers Council took the deliberate decision not to write sector or level specific criteria, preferring to allow the criteria to be appropriately interpreted by professionals dependent on the context within which they work. Closely linked to both of these key documents are the *Tātaiako* cultural competencies (Ministry of Education, 2011a). These competencies are considered critical in enabling teachers to work effectively with Māori learners, their whānau (extended family) and their iwi (tribe).

Prior to the publication of *The Registered Teacher Criteria* in New Zealand, RTLB Professional Standards were developed. These were intended to be used to

provide guidance in the RTLB appraisal process although they were not part of the teachers' collective employment agreement (Ministry of Education, 2007). The standards were developed in consultation with a range of stakeholders and described the performance expected of RTLB in relation to eight areas of their work. These areas were: professional knowledge; professional leadership; professional development; Te Reo Me Ona Tikanga (Māori language and customs); teaching techniques; staff and student management; relationship management; and, programme management.

In the USA, after concluding that there was considerable overlap between the competencies needed by special and general education teachers, the Interstate New Teacher Assessment and Support Consortium developed a common set of standards to be used in the training of both special and general education teachers (Dingle et al., 2004). Likewise, in Australia the National Framework for Professional Standards for Teachers sets out the competencies needed by all teachers in their work. This framework has been used to develop specific standards, for example, with regard to curriculum area, year level and specialist area (Kleinhenz & Ingvarson, 2007). This trend for the development a range of standards, including generic as well as specific standards, is an international one.

In the field of special educational needs (SEN), the extensive work of the Council for Exceptional Children (CEC) in establishing standards has been instrumental in providing professional leadership. "It is through professional standards used by preparation programs and aligned with licensing systems that the public can be assured that special educators are appropriately prepared for safe, ethical, and effective practice" (CEC, 2008, p. 9). The standards published by CEC provide international guidance for the professional practice of special educators

(CEC, 2008). Ten content standards were developed around initial special educator roles and six around advanced special educator roles. Within these standards statements of the knowledge and skills needed by special educators are outlined. For initial special educator roles, 10 topic areas are addressed in the standards, comprising the following: foundations; development and characteristics of learners; individual learning differences; instructional strategies; learning environments/social interactions; language; instructional planning; assessment; professional and ethical practice and collaboration. For professionals who have already had initial training as special educators and who are seeking to take on advanced professional roles, six advanced content standards covering the following topic areas are outlined: leadership and policy; program development and organization; research and inquiry; individual and program evaluation; professional development and ethical practice and collaboration. The CEC has committed itself to ensuring that its standards are comprehensive and rigorously validated (CEC, 2008).

Establishing Teacher Competencies Needed for Teaching Students with SEN

There has long been a focus on the importance of identifying the competencies needed for SEN practitioners to be effective (Herr et al., 1976; DeFur & Taymans, 1995; Professional & Teacher Development Task Force, 2004). From as early as 1978, the Division for Children and Adults with Learning Disabilities of the Council for Exceptional Children produced the document, 'Competencies for Teachers of Learning Disabled Children' (Newcomer, 1978). Competency statements related to a wide variety of topics were produced relevant to the following seven areas: the academic curriculum; oral language and cognition; behavior management, counseling and consulting; career and vocational knowledge; historical perspectives in the field;

and, educational operations (relevant, for example, to establishing rapport with students and influencing the classroom environment). These competencies reflected the attitudes and opinions of a range of knowledgeable stakeholders in the field (Newcomer, 1978).

In a document distributed by the American Association for the Education of the Severely/Profoundly Handicapped the authors, who comprised a range of SEN professionals and stakeholders, asserted that teacher effectiveness rests on many competencies (Bricker et al., 1977). Several broad areas were identified in which education professionals needed to develop specific competencies, over and above the skills needed by teachers in general education. These areas relate to behavioural technology, systematic instruction, life skills, teamwork and work with parents and communities. The authors also draw attention to the importance of education professionals having the specific skills needed to work with these students in early intervention and in pre-vocational and vocational education (Bricker et al., 1977).

Whitten and Westling (1985), following an extensive review of the literature, identified 59 competencies for teachers of students with profound disabilities, most of which were supported by several references. Thirty-six of these competencies were validated by surveys showing consensus among professionals in the field. Competencies fell into nine categories, with competencies in planning; assessment; curriculum; behavior management; instruction; physical/medical issues; working with parents; working with other professionals; and general knowledge, including for example child development, identified as relevant topics. Although the authors noted that the ultimate test of competency statements would be to demonstrate the links between these statements and gains in student achievement, they acknowledge the difficulties of research aimed at gaining such empirical evidence.

Hornby, Wickham and Zielinski (1991) documented a list of 42 generic competencies identified through the literature and validated by professionals as important for all teachers of pupils with SEN. Similarly, the Florida Department of Education (2009) outlines a list of 54 competencies and skills required for the certification of teachers of exceptional students. At around the same time work done by Zambone and Alsop (2009) discussed the rigorous development and validation of national competencies for interveners and teachers in the area of deaf/blind education. These competencies were subsequently adopted by the CEC as National Standards in 2011.

A study reported by Benitez, Morningstar & Frey (2009) identified 46 competencies considered critical for special educators with responsibility for the transition of students with disabilities from high school to adult life. In this study the importance of teachers' experience in their perceptions of their capacity to deliver effective services to students was highlighted. The study examined the perceptions of 557 special educators from across 31 states in the USA about how well prepared they considered themselves in the 46 identified transition competencies. Participants had between one and 41 years of teaching experience with a mean of 16.6 years. Their highest qualifications ranged from a bachelor's degree to a doctoral degree. Results of the study indicated that background experience of teachers and perceived levels of preparation were significantly positively correlated. Teachers who had higher scores on background experience measures perceived themselves to be more able to plan and deliver effective transition services. However, mean ratings across all 46 competencies revealed that teachers felt somewhat dissatisfied with their preparation and only somewhat prepared to deliver effective transition services to their students.

With changing educational contexts and continuing emphasis being placed on

the inclusion of students with SEN into mainstream education programmes, ensuring that all teachers have the competencies that they need to effectively support students in the school community is a priority. The Professional and Teacher Development Task Force (PTDTF, 2004), comprising a range of stakeholders including those from schools, universities, the Ohio educational authority and advocacy groups, concluded that there were some essential competencies that needed to be a part of effective preparation programmes for all teachers. These were competencies in professional and ethical practice, collaboration skills, capacity to create a positive, safe and nurturing learning environment, knowledge of key legislation and operating standards, the Individuals with Disabilities Education Act (IDEA), and skills necessary to assess and meet the needs of all students.

Dingle et al. (2004) also sought to identify and validate the essential competencies needed by special and general educators in order to effectively teach students with disabilities within inclusive settings. Based on multiple sources of information, including, for example, literature reviewed and the CEC Common Core of Knowledge and Skills Essential for All Beginning Special Education Teachers (Swan & Sirvis, 1992), the authors identified 50 such competencies. In their study Dingle et al. (2004) used three stakeholder groups to reach a consensus on twenty-four essential competencies for special educators working in inclusive settings.

Competencies in the Aotearoa New Zealand Cultural Context

The significance of developing cultural consciousness for special education professionals in Aotearoa New Zealand is paramount. It is critical that in seeking to improve outcomes for all students, issues of educational equity are addressed in relation to the unique national context of each country (OECD, 2014). Central to the

context of Aotearoa New Zealand, as described thoroughly in chapter one of this thesis, is its commitment to biculturalism and to upholding the principles of the Treaty of Waitangi that was signed between the Crown and Māori chiefs in 1840. However, despite this commitment to biculturalism and the inherent obligation to provide culturally responsive services for Māori, it is considered that the educational system in Aotearoa New Zealand has not been adequately meeting the needs of Māori (Bishop, 2010 & 2012; Bishop, Berryman, Cavanagh & Teddy, 2009; Bishop, Berryman, Wearmouth & Peter, 2012; Bishop & Glynn, 1999; Bishop, Ladwig & Berryman, 2014; Lock & Gibson, 2008; Macfarlane et al., 2007, Macfarlane & Macfarlane, 2013; Ministry of Education, 2009, 2011a & 2013a; Moore et al., 1999; Savage et al., 2011).

A number of initiatives have been undertaken to ensure that the aspirations of Māori within the education context are affirmed and that Māori learners are able to achieve educational success as Māori (Durie, 1998; Ministry of Education, 2011). Fundamental to these is the recognition of the need for educators to engage in culturally responsive practice (Bishop et al., 2009; Bishop et al., 2014; Bishop & Berryman, 2009; Savage et al., 2011). The issues of cultural responsiveness in the context of education in Aotearoa New Zealand and the need for educators generally, and RTLB specifically, to be culturally responsive in their practice, are discussed in detail in the introductory chapter of this thesis.

Underpinning the PGDipST(L&B) programme, which is the subject of this study, is a commitment to supporting students to develop a range of cultural competencies interwoven throughout the programme and aimed at ensuring that students are able to become culturally responsive professionals (refer to Table 1.3 in the introductory chapter). With research in Aotearoa New Zealand demonstrating that

"culture counts" in the realization of Māori student achievement (Bishop, 2010; Bishop & Glynn, 1999; Macfarlane & Macfarlane, 2013), the development of the cultural responsiveness cluster of competencies by specialist teachers is considered of key importance. Through a focus on such competencies, it is important that professionals develop sociocultural consciousness that recognizes how differential access to power influences experience of the world. Professionals should also have an affirming attitude towards learners from diverse cultural backgrounds; be able to act as agents of change; learn about students; utilize the resources that students bring to school from their cultural experiences as part of the learning process; and become culturally responsive teachers (Villegas and Lucas, 2002a & 2002b).

Professionals' Perceptions of Competencies in their Preparation Programmes

It is critical to ensure that competencies identified as important for teachers are soundly based in literature and validated by professionals (Herr et al., 1976). Ensuring that teachers who have gained specialist qualifications perceive themselves to be equipped by their training programmes with the necessary competencies to perform effectively in those specialist roles has long been a concern for educationalists. To this end, studies seeking the views of teachers about their preparation programmes have yielded important insights, shedding light on how programmes might be improved (Conderman et al., 2013; Heller et al., 1999; Lombardi & Hunka, 2001).

A national study examining the competencies of teachers of students with physical and health disabilities was carried out in the USA (Heller et al., 1999). Eight areas of competency, based on Council for Exceptional Children standards (CEC, 1996) were identified by teachers, university professors and school district directors as essential to the role of these teachers in order to ensure that they had the necessary

skills and knowledge to provide students with an appropriate education and a safe educational environment. Results of the teacher survey indicated that over 40% of teachers who had gained qualifications to teach these students did not consider that they were well trained in essential competencies (Heller et al., 1999), which is an alarming finding.

A study investigated a five-year pre-service teacher education programme at West Virginia University (Lombardi & Hunka, 2001). Participants were being prepared as general educators but also to teach pupils with special needs within inclusive classrooms. Ten outcomes related to SEN as well as 28 SEN competencies were focused on in the programme (Lombardi & Hunka, 2001). A questionnaire directly presenting the specific outcomes and competencies was developed to assess the extent to which students and staff perceived that these special education outcomes and competencies were being addressed throughout the programme. Students were also specifically asked to report whether or not they had actually acquired the skills that accompanied those outcomes and competencies. Interestingly, 25 percent of students nearing the end of the fourth year of the programme felt, "…neither competent nor confident to teach special needs students in inclusive settings" (Lombardi & Hunka 2001, p. 192). However, this finding must be seen in the context of these students still having a fifth year of internship study to undertake.

In another recent study, by Conderman et al. (2013), 64 beginning special educators were surveyed about their preparation programme at a midwestern university. Participants were asked how well prepared/confident they felt with regard to 25 competencies using a 4 point Likert scale (1 = not prepared/not confident; 4 = very prepared/very confident. Conderman et al. (2013) identified nine competency clusters or themes. Results indicated that participants were confident in areas in which

they considered themselves to have been well prepared and vice versa. Mean Preparation scores ranged from 2.47 to 3.85 while mean confidence scores ranged from 2.61 to 3.85. Interestingly, participants reported that the practicum component of the programme (teaching experience) had the greatest impact on their preparation.

Adult Learning

An exploration of some of the key issues relevant to adult learning is important in the context of the study reported in this thesis, because the participants are all adult learners. From the time of the early philosophers the importance of adult learning was recognized, with both Plato and Aristotle concerning themselves with the education of adults rather than children (Merriam & Bierema, 2014). Despite these early seeds having been sown, however, for many years there remained little comprehensive guidance to be found in the literature that was relevant to the teaching of adult learners. The Pedagogical model emerged between the 7th and 12th centuries when it was used to teach young boys about religion. It was later adopted by secular schools and, as the only educational model around when adult education took off after World War Two, it was also used as the basis for adult education (Merriam & Bierema, 2014). The work of Malcolm Knowles in introducing the concepts of andragogy in the USA signaled a major contribution to the field (Knowles, 1975; Knowles, Houlton, & Swanson, 2015; Tomei, 2010). Andragogy may be considered to be the art and science of helping adults to learn (Merriam & Bierema, 2014). In the context of globalization and an increasing proportion of adults making up global populations of students, the understanding of adult learning has taken on increasing importance (Merriam & Bierema, 2014).

Knowles has established six core principles of andragogy (Knowles et al., 2015). These concern: (1) the learners' need to know; (2) self-directed learning; (3) prior-experience of learners; (4) readiness to learn; (5) orientation to learning and problem solving; and (6) motivation to learn. These principles are briefly described in the following paragraph.

In the first core principle, Knowles focused on adults' need to know why they are learning something before undertaking the learning. Knowles also emphasized the important role of the facilitator in raising the awareness of adults of the value of the learning through, for example, activities that support adults in discovering gaps in their knowledge. This core principle has led to the general acceptance that adults need to be engaged in a collaborative planning process in order to facilitate their learning (Knowles et al., 2015). The second principal draws attention to the need to support some adults to transition from being dependent to self-directed learners. The third principle focuses on the importance of the prior experiences of the adult learner and of effectively tapping into these wide-ranging experiences. In the fourth principle Knowles et al. (2015) highlight the motivating power of timing learning experiences to coincide with developmental tasks in the real life situations of adults. The fifth principle relates to adults' life-centred, problem-solving orientation to learning, as opposed to the subject-centred orientation of children. The final principle centres on the primarily internal nature of adult motivation as they continue to desire to grow and develop (Knowles et al., 2015).

Knowles also acknowledges, in his andragogy in practice model, that a variety of other factors influence adult learning. These include learner differences, situational differences and the goals and purposes of the learning (Knowles et al., 2015). In discussing the impact of adult learner differences, Merriam and Bierema

(2014, p. 71) note, for example, that, "Understanding how aspects of learner characteristics such as age, gender, race, or socioeconomic status play out within a learning environment is important for us to appreciate as both learners and educators."

Although it is clear that the variables that impact adult learning are numerous, andragogy, as a model for understanding some of its key aspects has been an enduring source of guidance (Knowles, 1975, Knowles et al., 2015). Two themes embedded in andragogy that have received extensive attention in the adult education literature are self-directed learning and the role of experience in adult learning.

Self-Directed learning

Self-direction has received considerable attention in the adult learning literature (Brockett & Hiemstra, 1991; Garrison, 1997; Merriam & Bierema, 2014). It may be considered as an instructional process in which the student takes the initiative at various stages of the learning transaction - from identifying learning needs and setting goals to gathering information and evaluating learning (Brockett & Hiemstra, 1991; Merriam & Bierema, 2014). This is congruent with a collaborative constructivist approach to education (Garrison, 2011). It can also be viewed as an internal process or personal attribute involving adults taking cognitive control of and responsibility for their learning (Merriam & Bierema, 2014). The potential power of self-directed learning finds support in the work of Carl Rogers who believed that learning was most significant when it was self-initiated and self-directed (Tomei, 2010). Educators such as Linderman and Dewey, instrumental in laying the foundations for developing a more systematic theory about adult learning, also emphasise the need to be self-directed (Tomei, 2010). The focus in adult learning needs to shift away from the conventional teacher-centred approach in which the teacher is the transmitter of knowledge taking full responsibility for what is to be learnt and how and when it is to

be learnt. Ideally, in adult learning the student is at the centre of the learning with teachers taking on the role of facilitators engaged in a process of mutual inquiry (Garrison, 1997; Knowles et al., 2015).

Garrison (1997) emphasizes the need for an understanding of self-directed learning to go beyond the learner controlling various learning tasks. According to Garrison, the adult learner must be actively engaged in both self-monitoring and self-management. Self-management involves such things as the management of learning goals, materials and learning strategies, whereas self-monitoring focuses on internal cognitive processes and metacognitive strategies. In the process of self-monitoring learners take responsibility for critical reflection and collaborative confirmation in order to integrate new learning with present knowledge. Reflecting on external feedback is regarded as an important part of the self-directed learning process (Garrison, 1997).

At the root of the adult need to be self-directing is the adult characteristic of maturity and the concept that adults have become fully grown people. It is important to recognize, however, that in any group of adults, there is likely to be a wide range of ability and that individuals are likely to be at different stages of development (Rogers, 1996). "Adulthood…is seen by many people as an ideal to which each person is striving – never fully attained but always more or less clearly set out before us" (Rogers, 1996. p. 36).

Because of the wide range of ability, experience and stages of development likely to exist within any group of adult learners, it is important to recognize that not all adult students will be at this same stage of readiness for self directed learning (Merriam & Bierema, 2014). Rogers (1996) and Tomei (2010) point out that many adults find re-entering formal education a difficult transition, particularly when this is

done after many years spent establishing their careers. These differences between adults may lead to tensions and contradictions within the learning context whereby some adults, who may be self-directing in every other aspect of their day-to-day lives, revert to a dependent role when they become involved in education. Some adults may "demand to be taught" in conventional ways (Knowles, 1984, p. 9). In assuming a more dependent role however, these adults are adopting an approach that conflicts with their deep psychological need to be self-directing, resulting in frustration (Knowles, 1984). It is widely considered that adult learners should be supported to become increasingly self-directed in order to maximise their learning (Brocket & Hiemstra, 1991; Garrison, 2011, Knowles et al., 2015; Merriam & Bierema, 2014; Rogers, 1996). Garrison (2011) notes that learner control reinforces effort and engagement and that students' perceived control is predictive of academic achievement.

Brocket & Hiemstra (1991) emphasise that educationalists should seek the optimum balance for learners between their level of self-directedness and the opportunities afforded them for self-directed learning, noting that situational factors need to be taken into account. The management of the learning transaction should be continually assessed and negotiated. Garrison (2011) notes that the transactional perspective involves a, "…dynamic balance of responsibility and control issues…" (p. 12), and that student capabilities need to be taken into account. In some learning situations it may be in the best interest of learners for them to relinquish some control in the learning transaction. This may be the case, for example, where the learner has a lack of knowledge within a particular area (Brocket & Hiemstra, 1991; Knowles et al., 2015).

Experience – the richest resource for adult learners

Another key theme in adult learning is the importance of adult experience (Knowles et al., 2015; Merriam & Bierema, 2014; Rogers, 1996). The work of John Dewey was influential in bringing to the fore the central role of experience in learning (Merriam & Bierema, 2014). His contemporary, Linderman, in *The Meaning of Adult Education* (1926) asserted that, "…the resource of highest value in adult education is the learner's experience" (p. 9). The critical role of experience in adult learning is recognized in andragogy and well supported in the literature (Knowles, et al., 2015; Merriam & Bierema, 2014; Rogers, 1996; Tomei, 2010).

Rogers (1996) points out that adults have a huge amount of experience in which they have a great deal of emotional investment. To devalue or ignore that experience within the educational context implies rejection of the person. Rather than devalue experience, it is essential to harness the experience of adult learners in order to ensure the effective learning of all group members. A constructivist approach to learning using experience is fundamental in adult education (Merriam & Bierema, 2014). Although the experience that adults bring to the learning table is a very powerful tool in learning, it is important to recognize that it can also result in established biases and close mindedness that may act as a barrier to building new knowledge if new learning challenges established mental models (Knowles et al., 2015).

Reflective Practice

Reflective practice enables learners to utilize experience. It refers to the process of reflection on experiences or practice, not only after the experience has taken place but also during the course of the experience (Merriam & Bierema, 2014). Experience is both a resource to be drawn upon in the learning process and, through reflection,

experience can also be a stimulus for new learning. Reflection on experience enables learners to gain understanding and make meaning for themselves (Garrison, 1997; Merriam & Bierema, 2014; Rogers, 1996). O'Neill (2008), noting that teachers in schools need to develop high levels of skill and competence in order to cope with the complexities of students with diverse needs, identifies time and encouragement for reflection on experience as central to their learning. More that simply reflection, however, many authors consider that critical reflection on experience is important in meaningful learning (Rogers, 1996). As noted earlier, Garrison (1997) regarded critical reflection as integral to the adult self-directed learning process. He also emphasized that learning is not a solitary pursuit and that confirmation of knowledge through collaboration should also be conceptualised as integral to self-directed learning (Garrison, 1997).

Communities of Practice

Learning is a complex behavior and, in keeping with Vygotsky's social constructivist perspective, occurs as people interact with each other and is shaped by sociocultural context (Knowles et al., 2015; Liu, Carr & Stobel, 2009; Merriam & Bierema, 2014). Wenger (2000) points out that human beings have always formed communities in which learning is shared and concludes that communities of practice (CoP) are "…basic building blocks of social learning systems…" (Wenger, 2000, p. 229). The work of Lave and Wenger (1991) in which the term 'community of practice' was coined, is considered seminal in focusing attention on the central role of CoP in facilitating informal, collaborative learning (Cox, 2005; Hara, 2009).

Participating in CoP is considered by some writers to be essential for learning, enabling individuals to reflect on experience and grow their knowledge and understanding (Wenger, 2000). According to Lave and Wenger (1991) participants

within dynamic CoP have different interests and levels of knowledge. Newcomers to the community are enabled to learn through their engagement with more experienced community members (Cox, 2005; Hara, 2009; Ryba, Selby, and Kruger, 2002). Hara (2009) acknowledges the important learning of novices within CoP but goes on to emphasise that experienced and well established members of CoP are also able to learn from novices, as experiences are shared. The conceptualisation of CoP is further enriched by the work of Brown and Duguid (1991) in which emphasis is placed not just on experience and knowledge sharing but on the capacity within CoP for the generation of new solutions to problems (Cox, 2005). Merriam and Bierema (2014) note that, although a community of practice becomes a 'learning community' when learning is not just a matter of course but is at the very core of the community, the terms 'community of practice' and 'learning community' are often used interchangeably.

In considering the role of CoP within the professional development context of organisations, Hara (2009) asserts that CoP operate as "… collaborative, informal networks that support professional practitioners in their efforts to develop shared understandings and engage in work-relevant knowledge building" (p. 3). Learning within these informal CoP is in contrast to learning in many formal educational institutions where learning is treated as an individualistic, competative activity rather than a shared experience (Cox, 2005; Ryba et al., 2002).

One of the key elements of effective CoP is a supportive culture in which feelings of trust and acceptance among group members are felt (Hara, 2009; Lord & Lomicka, 2008; Wenger, 2000). As has been widely recognized in the literature, learning that may contradict previously held views or beliefs can be threatening for learners. Therefore, the need for emotional safety within learning environments is

important (Knowles et al., 2015; O'Neill, 2008; Tomei, 2010). Psychological safety within CoP supports participants to be willing to take risks and try new things as part of their growth and learning (Ryba et al., 2002).

Wenger (2000) is careful to issue a caution with regard to CoP noting that although such communities evolve to support growth and learning, they can also become stagnant and close-minded. He emphasises the need for CoP to be reflective and to maintain a spirit of inquiry.

E-learning

The field of e-learning is rapidly developing and has attracted considerable interest from those involved in higher education and teacher education (Garrison, 2011; Haythonthwaite & Andrews, 2011; Thompson, Klass, & Fulk, 2012; Vernon-Dotson, Floyd, Dukes, & Darling, 2014). It has, however, been plagued by inconsistency of definition. A review of the literature reveals a confusing use of terms that are often used interchangeably with uncertainty as to exactly what the characteristics of these terms are (Moor, Dickson-Dean & Galyen, 2011). Terms used include, for example, distance learning, e-learning, online learning and web-based learning (Moor et al., 2011). E-learning can, however, be most clearly defined as, "…electronically mediated asynchronous and synchronous communication for the purpose of constructing and confirming knowledge" (Garrison, 2011, p. 2).

Within such a definition a very wide variety of programmes and designs in higher education may be considered to be e-learning (US Department of Education, Office of Planning, Evaluation, and Policy Development, 2010; Vernon-Dotson et al., 2014). The two primary forms of e-learning are online and blended learning (Garrison, 2011). Blended learning may be defined as, "…the organic integration of

thoughtfully selected and complementary face-to-face and online approaches and technologies" (Garrison & Vaughn, 2008, p. 148). Blended learning reaps the benefits of both face-to-face and online delivery methods (Lord & Lomicka, 2008).

Following concerns that e-learning might compromise the quality of the educational experience, attention has been paid to whether in fact this might be the case. Generally studies have concluded that e-learning is an effective way of providing instruction, proving at least as effective as face-to-face instruction (Dixon, 2010; Fishman et al., 2013; Liu et al., 2009; Lord & Lomicka, 2008; Rakap et al., 2014; Thompson et al., 2012; Vernon-Dotson et al., 2014; Yuen, 2011).

Results from a meta-analysis conducted by the US Department of Education, Office of Planning, Evaluation, and Policy Development (2010) concluded that on average students in e-learning conditions performed modestly better than those in face-to-face conditions. The authors are careful to point out, however, that these results should not be interpreted as indicating that the e-learning medium in itself is more effective, but rather that a combination of factors in these e-learning conditions may support more effective learning. Among the factors, the study suggests, that are likely to be conducive to more effective learning are additional learning time and materials and additional opportunities for collaboration. Some authors also point to the ease with which curriculum materials can be added to and kept updated as a significant advantage afforded by the e-learning platform (Smith & Tyler, 2011).

Various researchers emphasise that it is the quality of the instruction that takes place within the learning context that is critical (Dixon, 2010; Garrison, 2011; Haythornthwaite & Andrews, 2011; Merriam & Bierema, 2014). These authors point out that, in planning and facilitation within the e-learning context, practitioners not only need to put emphasis on programme content, but also need to pay careful

attention to high quality course design and to effective instructional practices. Gruenbaum (2010) draws attention, for example, to the need for course design models that facilitate the connection of new knowledge with prior learning; ensure collaboration and social interaction between students; promote a self-reflective environment; ensure immediate application of what is learned; and, advance self-regulated learning. It has also been noted that, in order for learners to be successful in the e-learning environment, they need to be well-motivated, autonomous and able to self-regulate their learning experience (Gruenbaum, 2010; Rogers, 1996).

E-learning, Teacher Education and Professional Development

Within a range of teacher education and professional development training contexts, delivery using an e-learning format is widely considered as effective as traditional approaches. For example, Thompson et al. (2012) report on the use of e-learning to deliver an introductory special education course to students enrolled in a large teacher training programme at a midwestern university in the USA. Instruction was delivered to students either via face-to-face methods or through online learning. Student satisfaction, achievement and engagement were investigated in both conditions with results suggesting similar outcomes in both conditions.

Similarly, Fishman et al. (2013) conducted a randomized experiment to compare the effectiveness of professional development delivered to secondary science teachers in an online versus face-to-face training format. The authors found that teachers showed significant learning in both conditions with no significant differences between conditions.

Studies considering the professional development of teachers of students with SEN have also shown positive results. In their study of an online professional development training programme for teachers of students with autistic spectrum

disorders (ASD) Rakap et al. (2014) found that training delivered entirely online was effective in helping teachers to develop and improve the knowledge, competencies and skills needed to work effectively with students with ASD and their families.

Attention has, however, shifted from wholly online learning to various forms of blended learning (Cheung & Hew, 2011; Garrison, 2011; Garrison & Vaughan, 2008; Haythornthwaite & Andrews, 2011; Yuen, 2011; U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, 2010; Wong, Tatnall & Burgess, 2014). Kocoglu, Ozek, and Kesli (2011) note the well-documented benefits of blended learning, the aim of which is to bring together the advantages of face-to-face and online learning. The study conducted by these authors explored whether these benefits apply in the specific context of in-service English language teacher training. They examined the training of teachers of English as a foreign language most of whom taught in the secondary school sector. Training was delivered using either a face-to-face format or a blended learning format with the results of the research indicating that blended learning was as effective as face-to-face learning.

Liu et al (2009) describe a blended learning programme to provide professional development for primary school teachers to enable them to integrate engineering knowledge and thinking into their classroom programmes. These authors concluded that the training delivered was highly effective, building on the situated practice of teachers and enabling them to develop their knowledge, skills and practice.

Differing Advantages of Online and Face-to-Face Delivery

As discussed earlier, both e-learning and face-to-face instruction can provide successful platforms for learning. Haythornthwaite and Andrews (2011) however stress the importance of understanding the differences between offline and online communication, as well as the advantages that each has to offer, in order that

informed decisions can be made about the way in which learners are engaged across these platforms. Some of these differing advantages are discussed below.

In a climate in which universities are under pressure to increase quality and lower costs, e-learning has the potential to achieve both of these goals (Garrison, 2011). The e-learning framework enables large classes to be effectively managed (Garrison & Vaughn, 2008). In his discussion of professional development for teachers, Fishman et al. (2013) point out, however, that planning and implementing effective programmes involves substantial costs whether the learning platform is online or face-to-face. Whether online learning is the more cost effective option or not is dependent on the context in which the learning is taking place. For example, a large programme that is intended to run repeatedly, and is conducted over a relatively long period of time and engages a widely geographically distributed group of participants may be delivered more cost effectively online than in a face-to-face setting. Particularly because of the large start up costs, however, a small, one-off programme in which participants are located in close geographic proximity to each other may be more cost effectively delivered in a face-to-face setting (Fishman et al., 2013). Whether learning is online or face-to-face, it is vital that emphasis is placed on creating the conditions in which effective learning can take place.

One of the big differences between online and face-to-face learning situations is the number of communication cues that each of these has to offer. Whereas face-to face learning gives speakers access to multiple types of information, online learning is primarily text-based. The result is a drastic reduction in the number of communication cues conveyed between speaker and audience. The cues of body language, facial expression, tone of voice, age and status for example, may all be lost and issues relating to anonymity may arise. In online learning participants can, for example,

typically chose what they reveal of themselves and some may only be identified by a name or email address. Although anonymity may enable some participants to feel less inhibited and more able to contribute to discussions freely, it may also impede the building of trust among some participants and feelings of connection and belonging to the group may be diminished (Garrison, 2011; Haythornthwaite & Andrews, 2011).

The opportunity to form thoughts into text is however an important affordance of an e-learning environment. Although written communication has its drawback from some perspectives, for example when demonstration of practice might be helpful, forming thoughts into text is a major mode of communication in education and one that supports reflection and critical thinking and discourse (Haythornthwaite & Andrews, 2011). It enables participants to pay more systematic attention to the views of others.

The asynchronous nature of online communication offers many advantages. Unlike face-to-face communication in which the speakers all need to be present at the same time and to take turns to contribute, asynchronous communication is flexible and not bound by time and space. This makes it ideal for busy learners who have multiple commitments and who may be geographically isolated (Cheung & Hew, 2011; Haythornthwaite & Andrews, 2011; Fishman et al., 2013; Merriam & Bierema, 2014; Vernon-Dotson et al., 2014). Merriam & Bierema (2014) note, in fact, that within the USA, online learners are comprised mainly of non-traditional adult learners, for whom convenience and flexibility are important.

Asynchronous text-based communication provides increased opportunities for interaction, feedback and deep learning (Cheung & Hew, 2011, Fishman et al, 2013; Garrison, 2011; Gruenbaum, 2010; Haythornthwaithe & Andrews, 2011; Ryba et al., 2002; Vernon-Dotson et al., 2014;Yuen, 2011) while allowing learners greater

flexibility to work at their own pace, enabling them to spend more time on areas of individual interest or need (Fishman et al., 2013).

Haythornthwaite and Andrews (2011) point out, however, that although asynchronicity has many benefits, it also bring with it issues of boundaries and time management challenges of which both learners and instructions need to be aware. Whereas face-to-face classes take place in clearly marked spaces, e-learning engagement is relatively invisible. Increasing connectivity means that work can be taken into many place and can take place at any time requiring participants to set their own boundaries.

A significant advantage offered by the e-learning platform is the focus on opportunities for collaboration within online communities (Garrison, 2011; Haythornthwaite & Andrews, 2011; Lord & Lomicka, 2008; U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, 2010; Yuen, 2011). Dixon (2010) stresses that, as in any learning, one of the primary factors in effective online teaching, is effective student engagement. It is through harnessing the enormous potential for integrating personal learning and collaborative community engagement that the transformative power of e-learning in higher education might be realized (Garrison, 2011; Haythornthwaite & Andrews, 2011).

Garrison (2011) believes that e-learning is making educators face up to some of the common deficiencies in higher education. He argues that, traditionally, isolating and individualistic approaches to learning, such as the lecture, are often emphasized rather than transactional approaches that encourage collaborative engagement and critical thinking. In many traditional higher education settings, Garrison argues, learners are regarded as recipients of knowledge whereas e-learning is aligned to collaborative approaches that support learners to be joint creators of

knowledge within a community of learners. The role of learners as creators of knowledge within a collaborative context is emphasized in the work of Tappenden (2011). Through a collaborative approach learners are supported to take responsibility for their learning and for achieving quality educational outcomes (Garrison, 2011).

As discussed in the previous section in which CoP have been addressed, the value of community engagement within the context of learning is well established (Knowles, Holton & Swanson, 2015; Merriam & Bierema, 2014). The essence of CoP is their engagement in joint enterprises based around common practice. As such, they do not need to be bound by physical location (Haythornthwaite & Andrews, 2011). E-learning can take advantage of ready access to geographically boundless online CoP and change the way that learning takes place (Haythornthwaite & Andrews, 2011; Merriam & Bierema, 2014).

Supporting student interaction and engagement with content, peers and instructors and ensuring that the desired e-community is realized, is recognized as important in facilitating deep and meaningful learning that incorporates private reflection as well as public discourse (Dixon, 2010; Garrison, 2011; Gruenbaum, 2010; Haythornthwaite & Andrews, 2011; Thompson et al., 2012; Vernon-Dotson, 2014). Dixon (2011) notes further that students identified interactions, such as opportunities to read the web-site posts of other students, as valuable in enhancing learning.

With the exponential increase in the quantity and quality of information available through internet connectivity in a rapidly changing knowledge society, it is important for today's learners to actively engage with others in ways that encourage critical thinking and allow the accommodation of new ideas (Garrison, 2011; Haythornthwaite & Andrews, 2011; Merriam & Bierema, 2014; OECD, 2010;

Tappenden, 2011).

Developing a Community of Inquiry in e-learning

An educational Community of Inquiry (CoI), as outlined in Garrison (2011), is defined as, "a group of individuals who collaboratively engage in purposeful critical discourse and reflection to construct personal meaning and confirm mutual understanding" (Garrison, 2011, p. 15). Garrison's framework is rooted in the work of Wenger (2000) on CoP and finds support in the work of Yuen (2011). Garrison posits that the goal of e-learning is to create an active CoI and that the commitment to this process is needed by both students and teachers. All participants in the online community need to develop social presence, cognitive presence and teaching presence in order for higher order learning to be achieved. Further, as students engage and become more familiar with learning strategies and processes, they become increasingly self-directed and take on a greater teaching presence (Garrison, 2011).

Social presence involves the participant's ability to identify with the group, develop personal relationships and to communicate purposefully within a trusting environment (Garrison, 2011). The important role of social presence within the e-learning context is recognised by researchers (Dixon, 2010; Lord & Lomicka, 2008). Haythornthwaithe and Andrews (2011) and emphasises that promoting social presence leads to greater group cohesiveness and also to higher levels of critical thinking. These authors point out, however, that the text-based environment of e-learning may make it challenging for some learners to develop community bonds and feel a sense of interpersonal connectivity. The potential for social isolation in the online environment is recognized in the literature (Dixon, 2010). There is a risk that some students may not perceive high social presence and may "fade back" during the online learning process (Haythornthwaithe & Andrews, 2011, p. 121).

Cognitive presence is enhanced by social presence (Garrison, 2011; Haythornthwaite & Andrews, 2011) and refers to participants' ability to engage in critical reflection and discourse and to construct and confirm meaning through a collaborative process. Garrison (2011) issues a caution in relation to workload issues, indicating that if the quantity of material to be assimilated within a prescribed time period is excessive, students will need to adopt a surface level rather that a deep and critical approach to learning and reflection, thus compromising cognitive presence. The importance of developing and using skills of critical discourse in achieving meaningful learning is underlined by Haythornthwaite and Andrews (2011).

Teaching presence involves the design, facilitation and direction of cognitive and social presence in order to support worthwhile learning (Garrison, 2011). Teaching presence plays a key role in establishing and sustaining the learning community and helping students to feel connected and to flourish. Teaching presence also allows critical discourse to be modeled by both instructors and students, less responsive students to be engaged, and dominant students to be curtailed if necessary. Garrison (2012) emphasises that the expertise and experience of the instructor plays a vital role in teaching presence as he or she responds effectively to developing needs and events. This recognition of the importance of the instructor in determining the quality of the learning programme, is highlighted in the literature (Dixon, 2010; Gruenbaum, 2010).

Sociotechnical Considerations

Technology within the e-learning context continues to advance rapidly with numerous tools being developed (Merriam & Bierema, 2014; Vernon-Dotson, 2014). Haythornthwaite and Andrews (2011) point out that when teachers and learners first engage in e-learning approaches every aspect of the practice and technology is new

and the learning curve is steep. For some participants technology may present barriers to learning rather than act as a facilitating factor in the learning process (Haythornthwaite & Andrews, 2011; Merriam & Bierema, 2014; Tappenden, 2011;Vernon-Dotson, 2014). In a review of the literature Gruenbaum (2010) noted that, because adult learners are sometimes not as technologically savvy as traditional university students and have more family and work responsibilities, online learning may be more difficult for them. It is important, therefore, that technology and the needs of the learner are continuously reviewed and balanced in the interest of learning (Haythornthwaite & Andrews, 2011) and that strategies for supporting learners are carefully considered.

Some of these strategies to support learners include, for example, ensuring consistent presentation of important information (Smith & Tyler, 2011). This, assert these authors, supports students' easy navigation within e-learning sites. Other strategies include: providing reflective prompts for learners; making syllabi, assignments and progressive calendar deadlines clear; and providing support in identifying challenging and attainable goals (Gruenbaum, 2011).

Summary

This chapter has aimed to establish a sound theoretical background for the research study reported in this thesis by examining relevant international literature. In so doing, a range of issues have been addressed including: the role of competencies in teacher training and professional development; the principles that underpin adult learning; and, the implications of utilizing e-learning platforms to deliver effective programmes for teachers.

It was concluded from the review that establishing relevant competencies is critical in the development of teacher training programmes if teachers are to develop the knowledge, skills and attitudes they require in order to function effectively in the field. Studies seeking the views of teachers about their training programmes were found to have provided valuable insights that can be utilized in improving programmes and teacher competency. It was also found that teacher educators need to be mindful of the needs of adult learners in order to ensure that they are effectively supported to achieve meaningful learning. In addition, it was concluded that e-learning platforms are increasingly being utilized to deliver programmes successfully in higher education. It was recognized, however, that the affordances of both e-learning and face-to-face learning need to be fully appreciated by programme planners and instructors and appropriate strategies employed if the full potential of e-learning to improve outcomes in higher education is to be realized.

In the next chapter the methodology adopted for this investigation of the competencies in specialist teacher training is outlined. The study focuses on: the extent to which teachers perceived the competencies addressed in the PGDipST (L&B) to be important to their practice; the extent to which they perceived that they were enabled to develop those competencies; and their views regarding the enablers of and barriers to their competency development.

CHAPTER THREE: METHODOLOGY

"What is most fundamental is the research questions – research methods should *follow* research questions in a way that offers the best chance to obtain useful answers" (Johnson & Onwuegbuzie, 2004, p. 17).

The research questions for this study focus on the perceptions of graduates of the PGDipST(L&B) programme with regard to: (a) the importance of programme competencies to their professional work; (b) how well enabled they were to develop the prescribed competencies; and (c) factors that acted as barriers to or enablers of competency development. To answer these questions a mixed methods sequential research design was employed. This chapter briefly outlines some of the key features of the mixed method design and describes how the design was used in this study. This is followed by a description of participants and the research procedure. Next, details of the measures used in carrying out the study are described. Finally, the methods used to analyze the data and the principles that guided that analysis are discussed.

Use of a Mixed-Method Design

A mixed-method design is one of the three major research paradigms used in education research and includes a quantitative phase and a qualitative phase (Johnson & Onwuegbuzie, 2004). In this design the researcher collects and analyses data, integrates findings and draws inferences from both quantitative and qualitative approaches in the same study (Punch, 2009). The current study combines a questionnaire survey with focus group interviews, one of the most common ways of combining quantitative and qualitative methods (Morgan 1996; Punch, 2009). The

first phase of this study was the quantitative phase comprising an online questionnaire survey, while the second phase, the qualitative phase, involved a series of six focus group interviews. In this study equal priority was given to the two phases as both are considered to play an important role in answering the research questions. A key consideration in a mixed-method design study is whether to conduct the two research phases concurrently or sequentially. This study followed a sequential design and, as with many mixed-method studies (Creswell & Plano Clarke, 2011), comprised both fixed and emergent aspects.

The questionnaire survey conducted was 'fixed' and predetermined at the very start of the study and was implemented as planned (see Appendix B). The focus group interviews, however, involved emergent aspects, with details of group selection and issues to be raised in the interviews emerging as a result of the interpretation of questionnaire data. The eclectic approach offered by this interactive mixed-method design supported both the consideration of a broad range of quantitative data and the collection of rich data from the qualitative phase, allowing breadth and depth of understanding of key issues (Creswell & Plano Clarke, 2011). Since the second phase of the study complemented the first, with the aim of helping to explain and build upon the quantitative results, it is considered that this design fulfilled its purpose by providing the most rigorous methodology for answering the research questions posed (Cohen, Manion & Morrison, 2011; Punch, 2009).

The questionnaire survey enabled the views of graduates to be captured on a range of specific items, while the focus group interview phase supported a more detailed understanding of relevant issues, thus allowing the emergence of a more complete understanding of the impact of the programme. The important contribution of the focus group interview to educational research, and its value in bringing to the

surface aspects of an issue that might not otherwise be exposed, is acknowledged in the literature (Punch, 2009). The flexibility and spontaneity of this tool is widely acknowledged as it allows the interviewer to press for comprehensive answers in a way that would not be possible using other means (Cohen et al., 2011). In addition, by employing focus group interviews advantage could be taken of opportunities for participants to talk together, question each other and explain themselves to each other. This allowed participants to stimulate each other's thinking and recall, thus providing more food for thought than might otherwise have occurred had an individual interview tool been used. The process also has the advantage of allowing the researcher to observe the extent of agreement and disagreement between participants (Morgan, 1996). In addition, because participants in this study were dispersed around the country, using the focus group interview tool had the advantage of providing a more time efficient and cost effective way of carrying out the study (Hedges, 1985; Morgan, 1996).

Some Ethical Considerations of the Design

Although this design did not enable the researcher to provide anonymity because of the need to contact participants for follow-up interviews, confidentiality with survey data was assured, with raw data only being made available to the research team. Such assurances of confidentiality are not possible when conducting focus groups, however, the focus groups were small and participants were colleagues with mutual respect for each other. They were not considered to be from vulnerable populations nor was the nature of the research considered particularly sensitive. Careful consideration was also given to the method of data collection in the focus group phase of the study. Video recording is considered to be useful in focus group data collection although it is also considered more intrusive than audio recording. In line with

recommendations (Morgan 1997), therefore, permission was sought from participants to use this method and they were assured that raw data would only be available to the research team.

Participants

Eighty-one graduates had successfully completed the PGDipST(L&B) programme by November 2012. All 81 were invited to take part in the study. Forty-two of these agreed to take part and completed the required informed consent documentation. This represents a response rate of 52%. Of the 42 participants, 10 were male and 32 female. Participants were from a range of ethnic backgrounds, with the largest group identifying themselves as Pākehā (New Zealanders of European origin only) n=21 (see Table 3.1 below).

Table 3.1. Ethnicity of Participants

Ethnicity	Number
Pākehā only	21
Pākehā and Māori	6
Pākehā and Pasifika	1
Pākehā and Other European	1
Māori only	3
Pasifika only	2
Asian only	2
Other European	4
Other	2

Most participants were 40 years of age or older with none being 29 years of age or younger. Two participants were 60 years of age or older (see table 3.2 below).

Table 3.2. Age of Participants

Participant Age	Number
29 and younger	0
30 - 39	7
40 – 49	20
50 -59	13
60 and older	2

All participants had experience of teaching students with learning and behavioural needs with 20 having less than 10 years experience and 22 having more that 10 years experience. (Four participants had more than 25 years experience). At the time of the survey 16 participants were working in the primary school sector only, 24 working in primary as well as the secondary school sectors and two working in the primary, secondary and special schools or special units sectors (see Table 3.3 below).

Table 3.3. Educational Sector

Educational Sector	**Number**
Primary only	16
Primary and Secondary	24
Primary, Secondary and Special School/Unit	2

Research Procedure

Approval to conduct the research was obtained from the Human Ethics Committee of the University of Canterbury (see Appendix C) and from the directors and programme coordinators of the PGDipST team at Massey University and the University of Canterbury. Information about the study was emailed to all graduates and informed consent gained from participants (see Appendix D). The researcher was a part of the teaching team on the PGDipST programme from which the students had graduated and therefore had a good knowledge of the programme structure and its implementation.

The Quantitative Phase

In January 2013 the quantitative phase of the study commenced. Before the on-line questionnaire survey was administered to graduates four members of the University of Canterbury PGDipST teaching team piloted the instrument.

Piloting the Questionnaire Survey

The main aim of the pilot was to ensure that questions were clear and unambiguous so that they could be easily understood and answered by graduates. Members of the PGDipST teaching team were selected to carry out the pilot because they were familiar with the context of the programme, the graduates who would complete the survey, and the aims of the study being undertaken. All four team members involved in the pilot reported back to the researcher that the questions were clearly worded and the questionnaire layout was easy to follow. Based on the feedback therefore, no substantial changes were made to the instrument. However, team members made some suggestions for very minor changes to the wording of some competencies. These suggestions were adopted. For example, abbreviations used in the questionnaire were spelt out. Another example of the minor changes made was in relation to survey question number 23. Before the pilot, the competency in this question was worded as follows: "Demonstrate knowledge and skills in using the code of ethical practice for various Specialist Teaching areas." Following the pilot an example was added to the competency in order to improve its clarity. In the finalized survey, therefore, the competency read as follows: "Demonstrate knowledge and skills in using the code of ethical practice for various Specialist Teaching areas (eg Teachers Council Ethical Guidelines).

Recruitment

Following piloting of the survey, information about the study, along with consent forms, was emailed out to all 81 students who had successfully completed the two year PGDipST(L&B) programme by November of 2012. It is recognized that a major difficulty in conducting surveys is securing a sufficiently high response rate. Throughout the recruitment process, therefore, steps were taken to boost the response

rate. When the initial information was emailed out to participants, for example, attention was paid to ensuring that participants recognized the relevance of the survey (Cohen et al., 2011). The aim of the study to inform the development of the programme was clearly outlined so that participants were aware of the importance of the research and its potential benefit to their colleagues and to the educational community. It was also recognized that offering a small incentive to complete the survey might contribute to gaining a larger response rate (Cohen et al., 2011), so participants were made aware that, as a small thank-you for their time, their names would be entered into a draw for four $50 supermarket vouchers on completion of the survey. Email addresses for participants were obtained from the database on the Moodle site used by programme administrators.

Of these 81graduates, 26 responded to this initial email giving their consent. Two of the initial emails came back as being undeliverable. Contact addresses were obtained from the programme Moodle database and letters were sent to these two graduates. One of these graduates responded to this form of contact by return post indicating their wish to participate in the study and giving their informed consent. No response was received from the other ex-student.

Once graduates gave informed consent, they were emailed with a link to the online questionnaire survey. Every effort was made to ensure that contact was made with all graduates and that they were reminded of the opportunities to take part in the study. In line with guidelines on increasing response rates a reminder email was sent to all participants who had not yet responded emphasizing how much their responses would be valued (Cohen et al., 2011). As a result of this 11 more participants responded, giving their consent. Of these 11 who gave consent, one participant did not go on to complete the survey, despite being sent a reminder email. An additional

participant responded explaining that she had too many work commitments and was not able to participate, although she indicated that she would try to complete the survey at a later date if it was needed. She was again contacted on April 1st and asked whether she would be able to complete the survey, but did not respond to this email.

An email was sent to all RTLB Cluster Managers who were managing graduates in their post-programme RTLB roles, requesting confirmation of the email addresses of graduates. This process did not yield any further participants. Two further reminder emails were, however, sent out to participants who had not yet responded, including one extending the deadlines for completion of consent forms and for the return of online surveys. This resulted in three more participants taking part than may otherwise have been the case. An email was also sent to those students who had completed the survey requesting that they remind colleagues with whom they were working about the opportunity to take part in the study. One more participant responded, apologizing for the delayed response. This final participant survey was completed on 20th April, 2013. Therefore, the process from piloting the initial survey with university staff to collecting the final online survey from graduates took place over a four-month period. In total 42 students completed the questionnaire survey. This represents a response rate of 52 per cent.

The Qualitative Phase

Following preliminary analysis of the quantitative data, using guidelines drawn from the literature, six focus group interviews were conducted. According to Morgan (1996) most research projects involve between four to six focus groups, with the goal being to conduct only as many groups as is needed to provide trustworthy answers to the research questions and the most appropriate number of groups being dependent on the individual nature of the study. While exceeding six groups can lead to saturated

data with little new information emerging, it was considered appropriate to conduct no fewer that six focus group interviews in this study as group sizes were small (between two and three participants). So comparing the discussions from six groups would enable the researcher to determine whether participants were repeating themes that had been raised in earlier groups (Morgan 1997).

Interviews were conducted in various parts of the North Island of Aotearoa New Zealand. Drawing on a preliminary analysis of the questionnaire survey data, participants were selected to reflect the greatest possible range of views as gauged by their responses. Groups were also selected to include participants who demonstrated differing levels of online programme engagement and care was taken to ensure that the voices of both Māori and non-Māori participants could be captured. Consideration in recruitment also had to be given to more practical matters, such as the distance and costs of participant travel. The fact that no focus groups were conducted in the South Island was unsurprising as 90% of participants in the study lived and worked in the North Island. This reflected the trend in the programme generally with (88%) of all students who completed the programme in 2012 living and working in the North Island.

Emails were sent to 20 participants inviting them to take part. Every effort was made to establish interview dates, times and venues that were the most convenient for participants. Care was also taken to ensure that settings were conducive to discussion so that interviews would not be interrupted. Five interviews took place in meeting rooms at the school at which at least one of those taking part was based. In one case, where participants worked in very large rural areas, the focus group interview took place in a private room in a restaurant. This venue was selected because it was

considered by participants to be the most convenient and equidistant from their places of work.

Although 20 participants were selected, due to other commitments four of these were unable to attend and so a total of 16 participants took part in this phase of the study. The researcher conducted the interviews with the support of a member of the supervisory team who was also a member of the PGDipST(L&B) progamme team. With the consent of participants, all interviews were video recorded using a laptop computer.

Questionnaire Measure

The questionnaire survey is a widely used and useful instrument for collecting information (Cohen et al., 2011). A three-part online questionnaire survey, comprising 68 questions in total, was administered using Survey Monkey. This allowed for a clear, unambiguous and attractive layout, features important in survey design (Cohen et al., 2011). (A copy of the Word version of the questionnaire is presented in Appendix B. This is not as user friendly as the version that the graduates completed on Survey Monkey). The first part of the survey comprised ten demographic questions, the second comprised 55 questions specific to each of the four courses of the programme, while the third part of the survey comprised three questions relevant to the programme as a whole. The survey is described in further detail below.

The first of the ten demographic questions required participants to record their name. This was necessary so that participants could be followed up and invited to take part in the focus group interviews following on from the survey. The other nine questions were closed questions with a prescribed range of responses from which

respondents could choose, making these questions easy and quick for participants to answer.

Two questions enabled participants to select their answers from more than one of the fields presented. The first of these was a question related to the educational sector in which participants were employed. It was recognized that some participants might work across all of the sectors presented and could be employed in special schools as well as in the primary and the secondary sectors. Similarly, participants could select more than one option to describe their ethnicity. For this question a text box was provided so that participants could specify their ethnicity if they considered that none of the options provided was appropriate for them. Demographic questions were considered important to the consideration of the research questions and were, therefore, set up so that respondents were required to provide a response to each question before moving on to the next question.

The second section of the survey comprised 51 closed and four open-ended questions and was divided into four sub-sections. Each sub-section related to competencies in one of the four courses in the programme as follows: Theory and Foundations of Learning and Behaviour Diversity (10 competencies); Core Theory and Foundations of Specialist Teaching (20 competencies); Evidence Based Inter-professional Practice (eight competencies) and the Practicum Course for Learning and Behaviour (13 competencies).

The focus of this section was to collect data on the importance of programme competencies and the extent to which participants considered that they were enabled to develop them. Participants responded to the following highly structured closed question in related to each competency on a five-point semantic differential rating scale:

(a) To what extent did the course enable you to develop this competency? End points were labeled on the scale with 1= minimally enabled, and 5= substantially enabled. (b) To what extent is this competency important to your professional work? End points labeled were 1= minimally important, and 5= substantially important.

This question format was used not only because it provided a quick and effective way for participants to answer, encouraging higher rates of survey completion, but also so that comparisons could be made across the sample and frequencies of responses could be analysed (Cohen, et al., 2011). Semantic differential rating scales, using opposite pairs of words at each end of the scale, are regarded as a relatively simple yet effective technique for measuring attitudes and are widely used in educational research. This flexible tool allows the researcher the opportunity to generate numerical data as well as to measure opinion, combining quantity with quality (Cohen, et al., 2011; Punch, 2009). As with the demographic questions in the first section of the survey, participants were required to answer each closed question before moving on to the next, although they could choose a "don't know" option. This was done to minimize the difficulties of incomplete data sets.

As indicated above, in addition to the 51 closed questions relevant to the 51 competencies of the programme, in relation to each of the four courses one optional open question was also included. These questions allowed participants the opportunity to make any comments that they wished, relevant to course competencies in each of the courses. These open-ended questions were considered useful in giving participants a window of opportunity to shed light on possible issues relevant to course competencies. A text box was provided so that participants could write a free account unconstrained by pre-set categories of response (Cohen et al., 2011). Participants were not required to respond to open-ended questions before moving on to the next

question.

As explained in the introduction chapter, programme competencies were jointly developed by teams of professionals from Massey University and the University of Canterbury taking account of various data sources including, information gained from a national survey of stakeholders in the community and from advisory group consultations. Competencies had been outlined in the curriculum map for each course that had been made available to students at the start of their course of study. In each of the courses broad domain areas were identified and course content to address competencies, related to essential knowledge, skills and attitudes, was developed. Students were required to set personal learning goals to address competencies.

The software programme Statistical Packages for the Social Sciences (SPSS) version 21 was used to measure internal consistency amongst the closed question items in Part 2 of the survey (n=51) using Cronbach's alpha coefficient. The reliability score for the two domains that comprised this section of the survey (the importance of the competencies to participant's professional work and the extent to which the programme enabled competency development) was *alpha = 0 .965* (importance) and *alpha = 0.971* (enablement). Guidelines suggest that these scores signify very high internal consistency with an alpha coefficient of 0.90 or greater considered very highly reliable (Cohen et al., 2011).

The third part of the survey comprised three open-ended questions and required participants to consider all four courses of the programme. Participants were required to answer the first two questions before moving on. These questions were aimed specifically at collecting data on the aspects of the programme that (a) most helped participants to develop course competencies, that is facilitating factors, and (b)

to gain feedback on barriers to competency development. The third question was optional and provided participants with the opportunity to make any final comments, relevant to the programme, that they wished to make.

Interview Measure

Of the six focus group interviews conducted, four groups comprised three participants while two groups comprised two participants. It was considered that small groups were appropriate for the purposes of this study as all participants had a high level of involvement with and interest in the topic and small groups would allow each participant more time to discuss their views. It was also considered that these groups of professionals, who were familiar with each other in the context of their RTLB work and through their study, were respectful of each other, making group dynamics very suitable for the discussion of issues and the collection of useful data in a small group situation (Morgan, 1996). Participants had been advised that interviews were expected to take between an hour and an hour and a half.

In line with Krueger and Casey (2009), two people conducted the focus group interviews, with both taking on the role of moderators rather than what is often a more directive role of the interviewer within the context of the individual interview. The primary researcher and moderator, was a tutor on the programme, while the assistant moderator was one of the Learning and Behaviour course coordinators and an experienced researcher. Both were therefore very familiar with the programme and the participants. Interviews were semi-structured and conducted in an informal style in order to promote rapport and to prompt graduates into discussing their experiences of the programme.

Prior to the interviews being arranged the two interviewers reviewed the aims

of the interviews and agreed the interview procedures. These included the delivery by email of pre-interview information and pre-interview discussion 'warm-up' questions (Morgan, 1997). The semi-structured interviews comprised two broad questions and the use, as necessary, of prompts that had been generated for each question (see Appendix E). These prompts were devised using information obtained from participants' responses to the open-ended questionnaire items relevant to enablers of and barriers to competency development. Interviewers also agreed the roles that each would play during the course of the interview. This was in order to ensure that procedures were standardized across all six interviews.

Pre-Interview Information

The week before the interview was to take place participants were sent an email to remind them of the aim of the study, which was to inform the development of the programme. They were also reminded of the purpose of the interview, which was for the researcher to gain their perspectives on barriers to and enablement of programme competency development. From the outset, therefore, the researcher positioned herself as the learner. Participants were also reminded of the date and venue for the interview and were provided with two documents. The first document was a list of the topic areas covered in the endorsement specific course of the programme (the L&B course). The second document was a list of the programme competencies. Participants were told that these documents had been provided to jog their memory of the programme content and structure and that we would discuss them on the day of the interview in relation to their views on whether there were any topics that they would like to see added to the course content or any that they considered could be taken out of the L&B course. They were also told that they would be asked whether they considered the order in which topics were being currently addressed was appropriate.

Pre-Interview Discussion

Focus group interviews took place between August and November of 2013. Care was taken to ensure participants felt comfortable from the start, with light refreshments made available (Krueger & Casey, 2009). In line with suggestions made by Newby (2010) the purpose of the meeting was reiterated and the agenda made clear to participants at the start. As indicated to participants by email, a pre-interview discussion took place related to the documents sent out prior to the interview. Participants were asked to respond briefly to two discussion 'warm-up' questions (a) whether there were any topics that they would like to see added or deleted from the list of topics covered on the course and (b) whether they considered the order in which topics were addressed in the L&B paper to be the most appropriate. It was considered important to have this discussion because of the time lapse between when the participants had completed the course in November 2012 and when interviews were conducted.

These discussions were also considered important as an aid to minimizing any perceived status differences between the interviewers as programme tutors and participants as graduates (Punch, 2009) prior to the start of the interview. The interviewers had the opportunity to be open and to acknowledge the key role of the knowledge, insights and experience of participants as co-creators of the data to make programme improvement possible. This tone of openness enabled interviews to take place within the context of co-equal relationships between interviewers and respondents thus producing a climate in which a greater range of responses and richer data might be gathered (Punch, 2009).

Interview Structure

Once the pre-interview discussion was brought to a close, the writer asked

participants to cast their minds back to the two years of their study and, in relation to the whole programme, consider two broad questions, namely the barriers to and enablers of their competency development. A list of prompts, based on the information given by participants in the survey questionnaire, had been prepared in relation to both of these questions (see Appendix E). If by the end of their discussions, participants had not mentioned some of the main issues that had been raised in the survey, they were asked whether or not these issues were of any relevance to their own competency development. In order to adequately explore participants' experiences, research skills such as reflection, clarification, and requesting examples, were used by the interviewers as necessary during the course of interviews. In line with the literature (Morgan, 1997) a clear indication was given of when the session was ending with participants being asked whether they had any final statements that they would like to make.

Although most procedures were standardized between interviews, the design included an emergent aspect, allowing data gathered in one interview to inform the list of prompts for the following interview so that advantage could be taken of what was learned in previous groups. This level of emergence is in keeping with the exploratory value of focus groups (Morgan, 1996).

Role of the Interviewers

In focus group interviews the role of the interviewer is critical and is that of a moderator and facilitator monitoring and recording the interaction of the group (Punch, 2009). The role of the moderators in this study was in keeping with the semi-structured nature of the interviews, with the primary moderator asking the two broad questions and providing general prompts as necessary. The primary moderator worked with the assistant moderator to keep the interviews moving forward,

appropriately engaging in active listening (Cohen et al., 2011) and summarizing and reflecting back to participants what was said in order to confirm and clarify meaning as well as probing more deeply where necessary. Importantly, as suggested by Morgan (1997), the moderator with more experience with technology was given the responsibility of setting up the computer video recording and live testing to ensure that each interview was being clearly recorded. Following the interviews, the moderators had a short debriefing session (Krueger & Casey, 2009) verifying the main points and, discussing how they considered that the interviews went and providing feedback to each other on how each had participated in the process.

Quantitative Data Analysis

Quantitative data analysis was undertaken on data collected from the questionnaire survey using descriptive and inferential parametric statistics. Participant scores on the rating scale in relation to the 51 questions about the importance of competencies to the work of participants and the extent to which the programme enabled the development of those competencies, were examined. Descriptive statistics were generated using Excel, and mean scores, maximum and minimum scores and range of scores in relation to each of the 51 competencies were recorded. Descriptive statistics were also used to calculate overall mean scores for each of the four courses and overall mean scores for the programme.

Participation data obtained from the programme website, both for the numbers of times participants viewed the site in all of the four courses and for the number of posts participants made on the site, was also analyzed. Participant grades for each of the four courses were also examined using descriptive statistics. In making use of this type of data it is useful to be cognizant of concerns regarding the limitations of

statistical data summations such as these that are generated using various online platforms but that do not allow the nuances of the online interactions to be uncovered (Haythornthwaite & Andrews, 2011).

In order to determine whether there were any significant relationships within the data, SPSS version 21 was used and parametric statistics applied. These techniques were selected over non-parametric techniques as parametric statistics are considered to be more powerful (Pallant, 2001). Although there is concern expressed by some researchers about appropriateness of parametric statistics being applied to ordinal scale data and thereby violating assumptions, for example, related to level of measurement and of normality of distributions, many studies have consistently shown that these statistical techniques are in fact robust and can be used with such data without fear of obtaining inaccurate results (Norman, 2010; Rasch & Guiard, 2004). Rasch and Guiard (2004) in fact caution that non-parametric statistics are sometimes used where corresponding parametric statistics would have been preferable because of too much attention being paid to possible violations of assumptions.

In total 37 tests were applied to analyze relationships between: rating scale data and demographics; rating scale data and participation data; between items on the rating scales; rating scale data and participant grades; participant grades and participation data. In line with the literature (Cohen et al. 2011; Pallant, 2001) the Independent–Samples T Test was used to compare two groups and One Way between-groups ANOVA with Post-Hoc Test to compare three or more groups. The Levene test was also used to check for equality of variance. This was done to test whether the data met the criteria for homogeneity of variance. In the one case where this assumption was violated an alternative t-value that compensates for the variance

not being the same, was used when reading the SPSS test results, as is recommended by Pallant (2001).

According to Pallant (2001) small group sizes, such as those used in this study, could have an effect on results reaching the cut off point of the 0.05 level of statistical significance. Cohen et al. (2011) point to the need for information on effect sizes to be reported on and taken into consideration in addition to information on statistical significance. This is reiterated in the work of Smith and Morris (2015) who remind researchers of the importance of not relying too heavily on statistical significance alone and that non-significant results do not imply that effects are negligible. With these recommendations that effect size be reported on in addition to information on statistical significance, effect sizes were calculated using formulas for eta squared suggested in Pallant (2001). Guidelines suggested by Pallant (2001) for interpreting these results were used, with an eta squared result of 0.01= a small effect, 0.06 = a moderate effect and 0.14 = a large effect.

Pearson correlations were used to assess the relationships between two sets of scaled data. In interpreting the value of Pearson correlations (r) the guidelines suggested in Pallant (2001) were used, with r = 0.10 to 0.29 or r = -0.10 to -0.29 described as a 'small' correlation; r = 0.30 to 0.49 or r = -0.30 to -0.49 described as a 'medium' correlation; r = 0.50 to 1.0 or r = -0.50 to -1.0 described as a 'large' correlation.

L&B Competency Enablement (Rating Scale data) and Demographic Data

The literature on adult education emphasizes the importance and relevance of experience in the learning of adults (Knowles et al., 2015; Merriam & Bierema, 2014). The authors also acknowledge that learner characteristics impact on the

learning process. Six sets of demographic data were therefore explored in relation to competency enablement variables. These are listed (numbers 1-6) below.

1. Enablement ratings and the number of years of experience teaching pupils with learning and behavior difficulties. Two groups of experience levels were identified: 9 or less years experience (n=20); 10 years or more experience (n=22).

2. Enablement ratings and the educational sector in which participants worked. Two groups for educational sector were identified: Primary sector only (n=18) and Primary in combination with Secondary sector and special school or unit sector (n=24).

3. Enablement ratings and highest level of qualification. Two groups of qualification level were identified: PGDipST highest qualification (n=32); Masters degree highest qualification (n=10).

4. Enablement ratings and number of years of experience as an RTLB. Two groups of years of RTLB experience were identified: 4 years or less RTLB experience (n=34); 5 years or more RTLB experience (n=8).

5. Enablement ratings and number of years of mainstream teaching experience. Three groups of mainstream teaching experience were identified: 9 years or less teaching experience (n=11); between 10 and 19 years of mainstream experience (n=13); 20+ years of mainstream experience (n=18).

6. Enablement and number of years of relevant professional experience (other than teaching experience, for example, as an educational psychologist). Three groups of years of professional experience were identified. No professional experience (n=23); 4 or less years of professional experience (n=12); 5 or more years of professional experience (n=7).

In deciding upon groups, consideration was given to balancing the numbers of participants in each of the groups so that numbers in each of the groups were as equivalent as possible.

Competency Enablement Data and Online Engagement Data

Two measures of engagement were considered. These were the number of times students viewed the course website and the number of times students made posts on the website. This engagement data was then correlated with the enablement data collected from the questionnaire survey (numbers 7 – 16 below) as follows:

7. L&B enablement & number of times participants had viewed the L&B course site
8. L&B enablement & number of times participants had made posts on the L&B site
9. Core enablement and core views
10. Core enablement and core posts
11. EBIP enablement and EBIP views
12. EBIP enablement and EBIP posts
13. Practicum enablement and Practicum views
14. Practicum enablement and Practicum posts
15. Programme enablement and programme views
16. Programme enablement and programme posts

Two sets of data from the questionnaire survey were correlated. These were the mean ratings given by participants for the extent to which they perceived that they were enabled to develop competencies and the mean rating for their perceptions of how important the competencies were to their professional work in the field. The correlations carried out are listed (numbers 17-21) below.

Competency Enablement and Competency Importance

17. L&B enablement and L&B importance
18. Core enablement and Core importance
19. EBIP enablement and EBIP importance
20. Practicum enablement and Practicum importance
21. Programme enablement and Programme importance

Correlations were also carried out between enablement measures and participant academic grades as outlined (numbers 22-26) below.

Competency Enablement Data and Participant Academic Grades

22. L&B enablement and participant grades achieved in the L&B course
23. Core enablement and participant grades achieved in the Core course
24. EBIP enablement and participant grades achieved in the EBIP course
25. Practicum enablement and participant grades achieved in the Practicum course
26. Programme enablement and overall programme grades achieved

Qualitative Data Analysis

As mentioned above, all responses made to open-ended questions in the questionnaire survey relevant to facilitating factors in and barriers to competency development, were analyzed to create a start list of themes (Miles, Huberman & Saldana, 2014). In total 173 open-ended responses to these two questions were made by participants. These comments were read several times to identify emerging themes. First, two main categories were recorded – enablers and barriers. Themes were then noted and five themes identified under enablers of competency development and six themes identified under barriers to competency development.

Focus Group Interview Data Analysis

Systematic analysis of qualitative data (Krueger & Casey, 2009) was conducted directly from the video recordings of the six focus group interviews. Although there is a wide range of methods for analyzing qualitative data many authors agree that decisions about methods selected need to be driven by the purpose of the study (Cohen et al. 2011; Krueger & Casey, 2009; Stewart, Shamdasani, & Rook, 2007).

The first important decision in the data analysis process was whether to transcribe data or not, with some researchers arguing that transcription of the data is required in order to achieve a detailed and rigorous analysis (Bloor, Frankland, Thomas & Robson, 2001). Krueger and Casey (2009) and Cohen et al. (2011), however, draw attention to the possibility of researchers becoming overwhelmed by the sheer quantity of data produced in qualitative studies and becoming distracted by details. Bloor et al. (2001), for example, estimate that a 90-minute focus group interview can generate more than 100 pages of transcript. Halcomb and Davidson (2006) point to another important consideration: the costs in terms of time and resources required for transcription as well as the difficulties of ensuring their accuracy. These authors also question whether transcription is necessary, particularly in relation to mixed-method investigations seeking to identify common ideas, and point out that there are other more cost-effective and theoretically sound processes for managing interview data. Cohen et al. (2011) also highlight issues with transcription and outline the possibility of writing the analysis of data directly from an audio or video recording as an alternative to transcription. This method was adopted in this study. Important material was selected directly from the video recordings rather than from the mediated sources of a transcription. Such an approach, argue Cohen et al.

(2011), helps researchers to avoid getting caught up in detail and losing sight of the bigger picture.

In line with the literature (Krueger & Casey, 2009) a systematic approach to data analysis was adopted following a prescribed process. This involved incorporating the guidance provided in Hyatt's (1986) four-stage procedure that comprises familiarization, selection and ordering, description and interpretation.

Familiarization

This stage involved gaining a thorough knowledge of the data accumulated. This was done by first watching each of the six taped interviews without pausing to take any sort of notes so that a good sense of the interview in its entirety could be gained, including its themes and dynamics, as is outlined in Jones (1985). Notes made immediately after each of the interviews were also re-read as part of the familiarization process.

Selection and Ordering

In this second stage the concepts, issues and themes relevant to the research objectives were selected and arranged. "It involves the sorting out within the data, of patterns, connections, typologies and processes" (Hyatt, 1986, p. 38). In this stage of the analysis each of the six video recordings was watched several times by the researcher.

As discussed above, 11 themes had been identified from the questionnaire survey data in order to provide some structure and make sense of the qualitative data. Six of these sub-themes were relevant to barriers to competency development and five relevant to enablers of competency development. The researcher started the selection and ordering stage of the qualitative data analysis by watching the video recording of the first of the focus group interviews for a second time. Whenever a statement was

made in the interview that was relevant to research question three (enablers of, and barriers to competency development) the researcher paused the tape. The researcher, directly from the interview recording, then recorded this statement under a relevant theme or themes. Relevant quotations from participants were also recorded in a similar way at this stage. As the interview was watched, the researcher remained sensitive to the issues being raised by participants, adding or modifying themes as necessary. During the course of watching the recording of the first focus group interview, for example, the issue of "workload" began to emerge as a barrier to competency development and so this was added, bringing the total number of themes at the end of listening to the first interview to twelve. This process of watching the recordings and pausing to record significant statements under appropriate themes while remaining sensitive to issues raised, was repeated for each of the six interviews recorded. Whenever a theme was added or modified, all of the preceding tapes were listened to again so that information relevant to that theme could be accurately recorded. Considerable detail was recorded in this stage of the analysis so that no important information would be missed.

Description

Descriptions of what each group said in relation to the themes identified were recorded and the frequency with which themes emerged across the six focus groups was noted. Although it is important to recognize that frequency is not necessarily synonymous with importance, as it is possible that a key insight might only be discussed in one group (Krueger & Casey, 2009), Miles et al. (2014) contend that numbers can help the researcher to remain analytically honest.

At the stage of theme description, the researcher consulted with two experienced qualitative researchers, taking on board ideas relevant to the combination

and the clarification of some themes and the identification of broad overarching themes relevant to both the barriers to and enablers of competency development. As a result of this process, a final list of seventeen themes – ten barriers and seven enablers were agreed upon and five over-arching themes were identified. The over-arching themes were considered important as they identified issues relevant both to the barriers to competency development and to the enablers of that development.

Also at this stage the experienced researcher, who had acted as the second moderator during the interviews, carried out a reliability check of the data. This researcher randomly selected and watched two of the six focus group interviews, recording the themes identified in the interviews onto checklists. A comparison of themes identified by the two researchers was then carried out. This reliability check procedure revealed agreement on rating 15 of the 17 themes for each of the two focus group interviews, a reliability rate of 88% (see Appendix F).

Interpretation

In the final stage of the data analysis process implications from the data were discussed. These are addressed in the Discussion chapter of this thesis.

Ensuring the Reliability and Validity of the Study

As discussed earlier in this chapter the researcher was part of the teaching team on the PGDipST(L&B) programme that is the subject of this study. Therefore, it is important to summarise the wide range of measures put in place throughout the course of the study that helped to ensure its rigour and thereby guard against self-interest. It is important to emphasize that the ethics procedures of the University of Canterbury were adhered to and permission was granted to conduct the study (Appendix C). In line with ethics requirements, clear information was provided to participants about the

research so that they were fully aware of what was involved in the project and were in a position to give their informed consent (Appendix D).

Priority was given to a number of important factors, for example, selecting the methodology best suited to answering the research questions of this study and to ensure that as high a response rate as possible was achieved. Also important in helping to ensure reliability was the emphasis placed on carefully devising and piloting the questionnaire survey instrument so that it was clear and captured required information reliably. As part of these efforts, procedures were undertaken to ensure the internal consistency of the instrument using Cronbach's alpha and minor adjustments were made to the instrument in line with feedback obtained during the piloting process. These measures have been described earlier in this chapter.

Efforts were also made to ensure the reliability of the focus group interview procedure. Prior to conducting the interviews, for example, emphasis was placed on ensuring that the purpose of the study, to gain the perspectives of participants in order to inform the development of the programme, was clearly understood by participants. In addition, techniques were employed during the course of interviews to ensure that participant perspectives were accurately captured. An example of this was the process of reflecting back to participants what had been said so that information accuracy could be confirmed. Once data was collected care was taken to ensure that appropriate methods of analyzing that data were used. These issues have been discussed at some length earlier in this chapter and included, for example, taking cognizance of discussions with experienced researchers independent of the study, particularly in relation to the qualitative data analysis.

The following chapter presents the results of both the quantitative and the qualitative phase of the research.

CHAPTER FOUR: RESULTS

"Special education professionals initiate, support, and/or participate in research related to the education of persons with exceptionalities with the aim of improving the quality of educational services, increasing the accountability of programs, and generally benefiting persons with exceptionalities" (CEC, 2008, p. 4).

This chapter presents the results of both the quantitative and qualitative data analysis relevant to the three research questions of this study: (1) to what extent were programme competencies considered important to the professional work of participants; (2) to what extent did participants consider that the programme enabled them to develop the prescribed competencies; (3) what were the factors that participants considered to be barriers to and enablers of competency development. First, the results of the quantitative components of the study are addressed, including the questionnaire measures and student participation and grade data. This is followed by results of the analysis of the six focus group interviews that were conducted.

Results of Quantitative Data Analysis

Research Question One – Importance of Competencies

On a five-point rating scale, participants responded to the following question about each of the 51 programme competencies: "To what extent is this competency important to your professional work?" At one end of the scale 1 = minimally important and at the other end of the scale 5 = substantially important. The results of data collected for each of the four courses in the programme are presented in the sections below.

Importance of Competencies in the Theory and Foundations of Learning and Behaviour Diversity (L&B) Course

The L&B course focused on ten competencies. Mean ratings for the importance of these competencies to the professional work of participants ranged from 4.40 to 4.90 (see Table 4.1 below).

Table 4.1. Importance Rating of Competencies in the L&B Course.

L&B Course Competencies in order of Importance	**Importance Rating**
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate individual assessments and interventions for students who experience difficulties with learning and behaviour.	4.90
Demonstrate understanding of inter-personal competencies needed for working effectively with parents, whānau, teachers, other school staff and professionals not based in schools.	4.86
Demonstrate an understanding of the nature and extent of learning and behaviour difficulties and interventions to meet the needs of students who experience difficulties with learning and behaviour.	4.81
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate small group assessments and interventions for addressing learning and behaviour difficulties.	4.74
Demonstrate an understanding of the concept of teacher learning and the knowledge and skills for assisting teachers and principals to create positive learning environments.	4.67
Demonstrate an understanding of the RTLB role and its links to other learning and behaviour initiatives.	4.62
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate whole class assessments and interventions for addressing learning and behaviour difficulties.	4.62
Demonstrate knowledge and skills in developing, delivering, and evaluating RTLB operational processes.	4.55
Demonstrate an understanding of Kaupapa Māori - Thinking and theorising.	4.50
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate school wide systems and interventions for addressing learning and behaviour difficulties.	4.40

Results indicate that all ten competencies in the L&B course were highly rated in terms of their importance to the work of participants. There was only a small

difference of 0.5 of a rating point between the mean ratings for highest rated competency, which focused on knowledge and skills in individual assessment and intervention' (4.90) and the lowest rated competency, which focused on knowledge and skills in school wide systems and interventions (4.40). The overall mean importance rating for the competencies in this course was 4.67 on the five–point scale.

Importance of Competencies in the Core Theory and Foundations in Specialist Teaching (Core) Course

The Core course focused on 20 competencies. Mean ratings for the importance of these competencies to the professional work of participants ranged from 4.26 to 4.83 on the five-point scale (see Table 4.2 below).

Table 4.2. Importance Rating of Competencies in the Core Course

Core Competencies in order of Importance	**Importance Rating**
Demonstrate knowledge of collaborative and consultative models of working and strengthening partnerships.	4.83
Demonstrate knowledge of evidence based and effective teaching and learning practices.	4.81
Share professional knowledge and skills to learn with, from and about specialist areas.	4.74
Demonstrate an understanding of the concept and role of culture.	4.74
Demonstrate knowledge and skills in becoming an ethical and reflective practitioner.	4.71
Reflect on own cultural values, practices and beliefs.	4.71
Critically evaluate resources and intervention strategies.	4.71
Demonstrate knowledge of assessment models and practices	4.71
Critically evaluate assessment approaches and tools.	4.71
Reflect on and contribute to communities of learning and practice.	4.69
Critically discuss and evaluate curriculum and programme adaptations and solution/strength-based interventions.	4.69
Demonstrate knowledge of human development and learning theories.	4.64
Demonstrate knowledge and skills in using the code of ethical practice for various Specialist Teaching areas (eg Teachers Council Ethical Guidelines).	4.62
Critically review historical and current perspectives on special and inclusive education, disability and diversity.	4.62
Consult and collaborate on inter-professional implications of theories of learning and development.	4.57
Consult, collaborate and reflect on IEP or equivalent across Specialists areas.	4.50
Demonstrate an understanding of the concepts of biculturalism and multiculturalism.	4.48
Critique the influence of the majority culture on the New Zealand education system.	4.45
Critically discuss legislation, policy and curriculum documents across Specialist Teaching areas.	4.43
Discuss and compare assessments practices across Specialist areas	4.26

Results indicate that all 20 competencies in the Core course were highly rated in terms of their importance to the work of participants. There was a small difference of 0.57 of a rating point between the highest rated competency, which focused on

demonstrating knowledge of collaborative and consultative models of working and strengthening partnerships (4.83) and the lowest rated competency, which focused on comparing assessment practices across specialist areas (4.26). The mean overall importance rating for the competencies in the Core course was 4.63 on the five-point scale.

Importance of Competencies in the Evidence Based Inter-professional Practice (EBIP) Course

The EBIP course focused on eight competencies. Mean ratings for the importance of these competencies to the professional work of participants ranged from 4.57 to 4.74 (see Table 4.3 below).

Table 4.3. Importance Ratings of Competencies in the EBIP Course

EBIP Course Competencies in order of Importance	**Importance Rating**
Identify and critically analyse evidence-based practices in the area of learning and behaviour including special and inclusive education.	4.74
Demonstrate a commitment to sustainable practice.	4.69
Understand and apply evidence-based frameworks relating to inclusion.	4.69
Critically reflect on issues relating to forming partnerships with professionals and stakeholders.	4.67
Critically discuss the values, skills and attitudes needed for inter-professional practice.	4.67
Critically discuss and apply Māori and multicultural concepts and practices across Specialist Teaching areas.	4.60
Demonstrate knowledge and understanding of principles and practices of learning with from and about other specialist areas.	4.57
Collaborate on an inter-professional case study.	4.48

Results indicate that all eight competencies in the EBIP course were highly rated in terms of their importance to the work of participants. There was a small difference of 0.26 of a rating point between the highest rated competency, which focused on analyzing evidence-based practices (4.74) and the lowest rated competency, which focused on collaborating on an inter-professional case study

(4.48). The mean overall rating for the importance of competencies in this paper was 4.63.

Importance of Competencies in the Practicum for Learning and Behaviour (Practicum) Course

The Practicum course focused on 13 competencies. Mean ratings for the importance of these competencies to the professional work of participants ranged from 4.71 to 4.93 (see Table 4.4 below).

Table 4.4. Importance Ratings of Competencies in the Practicum Course

Practicum Competencies in order of Importance	**Importance Rating**
Demonstrate a commitment to promoting the well-being of all ākonga.	4.93
Gather, analyse and appropriately use assessment information that has been gathered formally and informally.	4.93
Establish and maintain effective professional relationships focused on the learning and well being of ākonga.	4.90
Demonstrate a commitment to ongoing professional learning and development of personal professional practice.	4.90
Show leadership that contributes to effective teaching and learning.	4.86
Conceptualise plan and implement an appropriate learning programme.	4.86
Promote a collaborative inclusive and supportive learning environment.	4.86
Demonstrate in practice, knowledge and understanding of how ākonga learn.	4.86
Demonstrate a commitment to bicultural partnership in Aotearoa New Zealand.	4.79
Maintain effective record keeping systems.	4.79
Use critical inquiry and problem solving effectively in professional practice.	4.79
Respond effectively to the diverse language and cultural experiences, and the varied strengths, interests and needs of individuals and groups of ākonga.	4.74
Work effectively within the bicultural context of Aotearoa New Zealand.	4.71

Results indicate that all 13 competencies in the Practicum course were highly rated in terms of their importance to the work of participants. There was a small

difference of 0.22 of a rating point between the highest rated competencies, 'demonstrating a commitment to promoting the well-being of learners' (4.93) and 'gathering, analyzing and using assessment information' (4.93) and the lowest rated competency, 'working effectively within the bicultural context of Aotearoa New Zealand' (4.71). The mean overall rating for the importance of competencies in the Practicum course was 4.84 on the five-point scale.

Summary of Importance Ratings across the Four Courses of the programme

Across the four courses of the programme all competencies were highly rated for their importance to the professional work of participants. There was a small difference of 0.21 between the mean overall ratings for the course with the highest mean competency importance rating, the Practicum (4.84) and the courses with the lowest mean competency importance ratings, the Core (4.63) and EBIP (4.63). The mean rating for the competencies in the L&B course was 4.76. The mean rating for importance of competencies across the 51 competencies in the programme was 4.70 on the five-point scale (see Table 4.5 below).

Table 4.5. Importance of Competencies across Four Courses of the Programme

Course	**Importance of Competency**	
	Mean	**Range**
L&B	4.67	4.40-4.90
Core	4.63	4.26-4.83
EBIP	4.63	4.48-4.74
Practicum	4.84	4.71-4.93
Overall Programme	4.70	4.26-4.93

Summary of Importance Rating of Competency Clusters across the Programme

As outlined in the introductory chapter, the 51 competencies of the programme can be grouped into five clusters (refer to tables 1.1 – 1.5). Tables showing the mean importance ratings for each of these clusters are presented in Appendix G. The mean importance of competency clusters is summarized below (see Table 4.6).

Table 4.6. Importance of Competency Clusters across Four Courses of Programme

Competency Cluster	**Importance of competency**	
	Mean	**Range**
Assessment and Intervention	4.71	4.26 - 4.93
Collaboration and Consultation	4.72	4.48 - 4.90
Cultural Responsiveness	4.63	4.45 – 4.79
Professional and Ethical Practice, Legislation, Policy and Curriculum Issues	4.66	4.43 - 4.93
Professional Development, Human Development and Learning Theory	4.75	4.57 – 4.90

Results indicate that across the five competency clusters of the programme all themes were highly rated for their importance to the professional work of participants. There was a small difference of 0.12 between the mean overall ratings for the cluster with the highest mean competency importance rating, Professional Development, Human Development and Learning theory (4.75), and the cluster with the lowest mean competency importance ratings, Cultural Responsiveness (4.63).

Research Question Two – Enablement of Competencies.

For each of the fifty-one competencies participants also responded on a five-point rating scale to the question, "To what extent did the course enable you to develop this competency?" The results for each of the four courses of the programme are presented below.

Enablement of Competencies in the L&B Course

The mean ratings of the extent to which participants considered that they were enabled to develop the ten competencies in the L&B course ranged from 3.52 to 4.46 on the five point scale (see Table 4.7 below).

Table 4.7. Enablement Ratings for Competencies in the L&B Course

L&B Course Competencies (listed in order of best to least well enabled)	**Enablement Rating**
Demonstrate understanding of inter-personal competencies needed for working effectively with parents, whānau, teachers, other school staff and professionals not based in schools.	4.46
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate individual assessments and interventions for students who experience difficulties with learning and behaviour.	4.21
Demonstrate an understanding of Kaupapa Māori - Thinking and theorising.	4.21
Demonstrate an understanding of the nature and extent of learning and behaviour difficulties and interventions to meet the needs of students who experience difficulties with learning and behaviour.	4.10
Demonstrate an understanding of the concept of teacher learning and the knowledge and skills for assisting teachers and principals to create positive learning environments.	4.00
Demonstrate an understanding of the RTLB role and its links to other learning and behaviour initiatives.	3.95
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate small group assessments and interventions for addressing learning and behaviour difficulties.	3.95
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate whole class assessments and interventions for addressing learning and behaviour difficulties.	3.83
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence -based, culturally appropriate school wide systems and interventions for addressing learning and behaviour difficulties.	3.57
Demonstrate knowledge and skills in developing, delivering, and evaluating RTLB operational processes.	3.52

Results indicate that all of the competencies in the L&B course were highly rated in terms of how well enabled to develop those competencies participants

considered themselves to be. There was a difference of 0.94 of a rating point between the mean enablement ratings for the highest rated competency, which focused on developing inter-personal competencies for working with parents and professionals (4.46), and the lowest rated competency, which focused on developing, delivering, and evaluating RTLB operational processes (3.52). The overall mean enablement rating for the competencies in this course was 3.98 on the five-point scale.

Enablement of Competencies in the Core Course

The mean ratings for the extent to which participants considered that they were enabled to develop the 20 competencies in the Core course ranged from 3.46 to 4.59 on the five-point scale (see Table 4.8 below).

Table 4.8. Enablement Ratings for Competencies in the Core Course

Core Competencies (listed in order of best to least well enabled)	**Enablement Rating**
Demonstrate knowledge of evidence based and effective teaching and learning practices. Share professional knowledge and skills to learn with, from and about specialist areas.	4.59 4.59
Demonstrate knowledge and skills in becoming an ethical and reflective practitioner.	4.55
Reflect on own cultural values, practices and beliefs.	4.46
Demonstrate an understanding of the concept and role of culture. Demonstrate knowledge of collaborative and consultative models of working and strengthening partnerships.	4.41 4.41
Reflect on and contribute to communities of learning and practice.	4.31
Consult and collaborate on inter-professional implications of theories of learning and development. Demonstrate an understanding of the concepts of biculturalism and multiculturalism.	4.28 4.28
Demonstrate knowledge of human development and learning theories.	4.26
Demonstrate knowledge and skills in using the code of ethical practice for various Specialist Teaching areas (eg. Teachers' Council Ethical Guidelines). **Critically review** historical and current perspectives on special and inclusive education, disability and diversity. Critically evaluate resources and intervention strategies.	4.18 4.18 4.18
Critique the influence of the majority culture on the Aotearoa New Zealand education system.	4.15
Critically discuss and evaluate curriculum and programme adaptations and solution/strengths-based interventions.	4.05
Demonstrate knowledge of assessment models and practices	3.97
Critically evaluate assessment approaches and tools.	3.95
Critically discuss legislation, policy and curriculum documents across Specialist Teaching areas.	3.92
Consult, collaborate and reflect on IEP or equivalent across Specialists areas.	3.56
Discuss and compare assessment practices across Specialist areas.	3.46

Results indicate that all of the competencies in the Core course were highly rated in terms of how well enabled to develop those competencies participants considered themselves to be. There was a difference of 1.13 rating points between the

mean enablement ratings for the highest rated competencies, which focused on demonstrating knowledge of evidence-based and effective practices (4.59) and sharing professional knowledge and skills (4.59), and the lowest rated competency which focused on comparing assessment practices across specialist areas (3.46). The overall mean enablement rating for competencies in this course was 4.19 on the five-point scale.

Enablement of Competencies in the EBIP Course

The mean enablement rating for the extent to which participants considered that they were enabled to develop the eight competencies in the EBIP course ranged from 3.88 to 4.55 on the five-point scale (see Table 4.9 below).

Table 4.9. Enablement Ratings for Competencies in the EBIP Course

EBIP Course Competencies (Listed in order of best to least well enabled)	**Enablement Rating**
Critically discuss the values, skills and attitudes needed for inter-professional practice.	4.55
Demonstrate knowledge and understanding of principles and practices of learning with from and about other specialist areas.	4.45
Identify and critically analyse evidence-based practices in the area of learning and behaviour including special and inclusive education.	4.21
Critically reflect on issues relating to forming partnerships with professionals and stakeholders.	4.17
Understand and apply evidence-based frameworks relating to inclusion.	4.14
Collaborate on an inter-professional case study	4.12
Demonstrate a commitment to sustainable practice.	3.98
Critically discuss and apply Māori and multicultural concepts and practices across Specialist Teaching areas.	3.88

Results indicate that all of the competencies in the EBIP course were highly rated in terms of how well enabled to develop those competencies participants considered themselves to be. There was a small difference of 0.67 of a rating point between the mean enablement rating for the highest rated competency which focused on critically discussing values, skills and attitudes needed for inter-professional

practice (4.55) and the lowest rated competency, which focused on critically discussing and applying Māori and multicultural concepts and practices (3.88). The overall mean enablement rating for the competencies in this course was 4.19 on the five-point scale.

Enablement of Competencies in the Practicum Course

The mean ratings for the extent to which participants considered that they were enabled to develop the 13 competencies in the Practicum ranged from 3.71 to 4.62 on the five-point scale (see Table 4.10 below).

Table 4.10. Enablement Ratings for Competencies in Practicum Course

Practicum Competencies (Listed in order of best to least well enabled)	**Enablement Rating**
Demonstrate a commitment to ongoing professional learning and development of personal professional practice.	4.62
Demonstrate a commitment to promoting the well-being of all ākonga.	4.48
Establish and maintain effective professional relationships focused on the learning and well being of ākonga.	4.45
Demonstrate a commitment to bicultural partnership in Aotearoa New Zealand.	4.38
Demonstrate in practice, knowledge and understanding of how ākonga learn. Promote a collaborative inclusive and supportive learning environment.	4.26 4.26
Work effectively with the bicultural context of Aotearoa New Zealand.	4.21
Show leadership that contributes to effective teaching and learning.	4.19
Conceptualise plan and implement an appropriate learning programme. Respond effectively to the diverse language and cultural experiences, and the varied strengths, interests and needs of individuals and groups of ākonga.	4.12 4.12
Use critical inquiry and problem solving effectively in professional practice.	4.05
Gather, analyse and appropriately use assessment information that has been gathered formally and informally.	3.86
Maintain effective record keeping systems.	3.71

Results indicate that all of the competencies in the Practicum course were highly rated in terms of how well enabled to develop those competencies participants considered themselves to be. There was a difference of 0.91 of a rating point between

the mean enablement rating for the highest rated competency, which focused on demonstrating a commitment to ongoing professional learning and development of professional practice (4.62), and the lowest rated competency which focused on maintaining effective record keeping systems (3.71). The overall mean enablement rating for the competencies in this course was 4.21 on the five-point scale.

Summary of Enablement Ratings across the Four Courses of the Programme

Across the four courses of the programme, competencies were all highly rated for how well enabled to develop those competencies participants considered themselves to have been by completing the courses. There was only a small difference of 0.23 between the mean overall ratings for the course with the highest mean competency enablement rating, the Practicum (4.21) and the course with the lowest mean competency enablement rating, the L&B course (3.98). The mean overall enablement rating for competencies in the both the Core and EBIP courses was 4.19. The mean enablement rating of competencies across the 51 competencies in the programme was 4.15 on the five-point scale (see Table 4.11 below).

Table 4.11. Enablement Ratings across Four Courses of the Programme

Course	**Enablement of Competencies**	
	Mean	**Range**
L&B	3.98	3.52 – 4.46
Core	4.19	3.46 – 4.59
EBIP	4.19	3.88 – 4.55
Practicum	4.21	3.71 – 4.62
Overall Programme	4.15	3.46 – 4.62

Summary of Enablement Rating of Competency Clusters

An outline of the five competency clusters identified across the four courses of the programme were presented in figures 1.1 – 1.5 of the introduction chapter and tables

showing the mean enablement ratings for each of these clusters are provided in Appendix H. Below a summary of the mean enablement ratings in these five cross-course competency clusters of the programme is presented (see Table 4.12 below).

Table 4.12. Enablement of Competency Clusters across the Four Courses of the Programme

Competency Cluster	**Enablement of competency**	
	Mean	**Range**
Assessment and Intervention	4.00	3.46 - 4.59
Collaboration and Consultation	4.34	4.00 - 4.59
Cultural Responsiveness	4.23	3.88 - 4.46
Professional and Ethical Practice, Legislation, Policy and Curriculum Issues	4.03	3.52 - 4.48
Professional Development, Human Development and Learning Theory	4.29	4.05 – 4.62

Results indicate that across the five competency clusters of the programme all clusters were highly rated for the extent to which participants considered that they were enabled to develop competencies by completing the four courses in the programme. This was so although, in the case of two clusters, mean enablement ratings were a little lower than in the others clusters. The two clusters that were rated slightly lower were the assessment and intervention cluster (4.00) and the professional and ethical practice, legislation, policy and curriculum issues cluster (4.03). The mean overall difference between the cluster with the highest mean competency enablement rating, collaboration and consultation (4.34) and the cluster with the lowest mean competency enablement ratings, assessment and intervention (4.00), was 0.34.

Closer analysis does reveal some differences within clusters. Within the assessment and intervention cluster, for example, mean enablement scores ranged from 3.46 for the competency which focused on discussing and comparing assessment practices across specialist areas to 4.59 for the competency which focused on demonstrating knowledge of evidence-based and effective teaching and learning practices. The difference between these two mean ratings was 1.13. Within the

professional development, human development and learning theory cluster, however, the range in mean scores was smaller – from 4.05 for the competency which focused on using critical inquiry and problem solving effectively in professional practice to 4.62 for the competency which focused on demonstrating a commitment to ongoing professional learning and development of personal professional practice. The difference between these two mean ratings was 0.57.

Competency Enablement and Demographic Variables

Seven demographic variables were examined to identify whether participants from different sections of the student population may have considered themselves better enabled to develop L&B competencies than others. The independent variable considered was L&B competency enablement. L&B competency enablement was selected over competency enablement measures from any of the other three courses of the programme because the L&B course was the endorsement specific course of the Post Graduate Diploma in Specialist Teaching (L&B) programme under review in this study.

The demographic variables considered were:

(1) years of special educational needs (SEN) teaching experience;

(2) the educational sector within which participants worked;

(3) levels of academic qualifications;

(4) number of years of experience working as a Resource Teacher Learning and Behaviour (RTLB);

(5) age;

(6) years of mainstream teaching experience;

(7) years of relevant professional experience, such as in the role of an educational psychologist.

Where two groups were compared (numbers 1- 4 above), an independent-samples t-test was conducted and where three groups were compared (numbers 5 - 7 above) one-way between-groups analysis of variance was used.

(1) Competency Enablement and Years of SEN Teaching Experience

Table 4.13 below shows that there were no statically significant differences in enablement scores for participants with nine or less years of SEN teaching experiences (N=20, M=3.96, SD=.55), and participants with 10 or more years of SEN teaching experience (N=22, M=4.00, SD=.70; t(40)=-.199, p=.843). The magnitude of the differences in the means was small and was well below the value at which a small effect might be indicated (Pallant, 2001). These results suggest that the number of years of SEN teaching experience did not influence the extent to which participants considered they were enabled to develop competencies.

Table 4.13. L&B Enablement and Years of SEN Teaching Experience

Demographic Data	**Groups**	**Mean**	**S.D**	**t value**	**Df**	**Sig. (s-tailed**	**Eta sq**
Competency Enablement and Years of SEN Teaching Experience	9 yrs or less N=20	3.96	.55	-.199	40	.843	.001
	10 yrs or more N=22	4.00	.70				

(2) Competency Enablement and Educational Sector

Table 4.14 below shows that there were no statistically significant differences in the enablement means between the following two groups of participants: (a) those who worked in the primary setting exclusively (N=18, M=3.90, SD=.60) and (b) those who

worked in the primary setting but who also worked in other settings, namely secondary settings or special school settings (N=24, M=4.04, SD=.65; t(40)=-.728, p=.471). The eta squared statistic (Eta squared =.013) provided evidence for a small effect. These results suggest the potential for a small (Pallant, 2001) but non-significant effect of the educational sector in which participants worked, on the extent to which participants considered that they were enabled to develop L&B competencies with participants from Primary and Other settings considering themselves to be better enabled to develop competencies than those from Primary Only settings.

Table 4.14. L&B Enablement and Sector of Employment

Demographic Data	**Groups**	**Mean**	**S.D**	**t value**	**df**	**Sig. (2-tailed)**	**Eta sq**
Competency Enablement & Educational Sector of Work	Primary Only N=18	3.90	.60	-.728	40	.471	.013
	Primary + Others N=24	4.04	.65				

(3) Competency Enablement and Level of Academic Qualification

The enablement means between participants for whom the post-graduate diploma was their highest level of qualification and those who entered the programme with a Masters degree were compared (see Table 4.15 below). There was no statistically significant difference in the scores for participants who had come into the programme with no post-graduate qualifications (N=32, M=3.95, SD=.64) and participants who already held a Masters degree (N=10, M=4.08, SD=.60; t (40)=-571, p=.571). The difference in the means was small and below the value suggested in Pallant (2001) as indicating a small effect (eta squared = .008). This result suggests that participants who enrolled into the programme with a Masters degrees did not consider that they

were any better enabled to develop competencies than participants for whom the post-graduate diploma qualification in specialist teaching was their highest qualification.

Table 4.15. L&B Enablement and Level of Academic Qualification

Demographic Data	**Groups**	**Mean**	**S.D**	**t value**	**df**	**Sig. (2-tailed)**	**Eta sq**
Competency Enablement & Highest Academic Qualification	PG Dip N=32	3.95	.64	-.571	40	.571	.008
	Masters N=10	4.08	.60				

(4) Competency Enablement and Years of RTLB Experience

Results indicate that there was no statistically significant difference in scores for participants with less than five years experience in the RTLB role (N=34, M=3.93, SD =.62) and participants with five or more years experience (N=8, M=4.19, SD =.67; t(40)=-1.041, p=.304) however, the eta squared statistic (eta squared =.026) provided evidence for a small effect (see Table 4.16 below). This result suggests the potential for a small but non-significant effect of years of RTLB experience on the extent to which participants considered that they were enabled to develop L&B competencies with participants with 5 or more years of RTLB experience considering themselves to be better enabled to develop competencies than those with less than five years experience.

Table 4.16. L&B Enablement and Years of RTLB Experience

Demographic Data	**Groups**	**Mean**	**S.D**	**t value**	**Df**	**Sig. (2-tailed)**	**Eta sq**
Competency Enablement & Years of RTLB Experience	Less than 5 yrs N=34	3.93	.62	-1.041	40	.304	.026
	5 yrs or more N=8	4.19	.67				

(5) Competency Enablement and Age of Participants

The potential effect of age of participants on the extent to which they perceived they were enabled to develop L&B competencies was examined. One group comprised participants who were 39 years or younger (N =7), a second group were between 40 and 49 years of age (N = 20) and a third group were those who were 50 years of age or older (N = 15). These results are shown in Table 4.17 below.

Table 4.17. L&B Enablement and Age

Demographic Data	**Group**	**Mean**	**S.D**	**F**	**Sig.**	**Eta sq**
Competency Enablement & Age of Participants	39 yrs & younger N=7	3.98	.65	.024	.976	.001
	40-49 yrs N=20	3.96	.58			
	50 yrs & older N=15	4.00	.71			

Results indicated that there was no statistically significant difference in mean scores for students 39 years or younger compared with either those 40-49 years of age or those 50 years and older ($F(2,39) = 0.024$; $p = .976$) consistent with a very small eta squared statistic (eta squared =.001). This suggests that age does not influence the extent to which participants considered themselves to have been enabled by the L&B course to develop competencies.

(6) Competency Enablement and Years of Mainstream Teaching Experience

The relationship between years of mainstream teaching experience that participants had and the extent to which they perceived course competencies were enabled was explored. One group of participants had nine or fewer years of mainstream teaching experience (N=11), a second group had between 10 and 19 years of teaching

experience (N=13) and a third group had 20 or more years of experience (N=18). These results are shown in Table 4.18 below.

Table 4.18. L&B Enablement and Years of Mainstream Teaching Experience

Demographic Data	**Group**	**Mean**	**S.D**	**F**	**Sig.**	**Eta sq**
Competency Enablement &Years of Mainstream Teaching Experience	9 yrs and less N=11	4.03	.62	.227	.798	.011
	10-19 yrs N=13	4.05	.59			
	20 years and older N=18	3.90	.68			

The results indicate that there was no statistically significant difference in mean scores across the three mainstream teaching experience groups (F(2,39)=.227; p=.798). However, the eta squared statistic (eta squared =.01) provided evidence for a small effect (Pallant, 2001). This result suggests the potential for a small but non-significant effect of years of mainstream teaching experience on the extent to which participants considered that they were enabled to develop competencies by the L&B course, with participants with 20 or more years experience considering themselves less enabled than others to develop competencies.

(7) Competency Enablement and Years of Professional Experience

The potential effect of years of professional experience on competency enablement was also explored. Such experience was considered to be, for example, work as an educational psychologist. One group of participants had no professional experience relevant to the programme (N=23), a second group had four or fewer years of relevant professional experience (N=12) and a third group had five years or more of professional experience (N=7). Again, there was no statistically significant difference in the enablement means across the three experience groups (F(2,39)=2.678; p=.081).

Although statistical significance was not reached at the 0.05 level, however, the eta square value of .12 suggests a moderate effect (Pallant, 2001) (see Table 4.19 below). This finding suggests that years of professional experience may be worth considering as a potential influential factor on students' perception of being enabled to develop competencies by the L&B course, with those with no relevant professional experience considering themselves to have been better enabled to develop competencies that those with relevant experience.

Table 4.19. L&B Enablement and Years of Professional Experience

Demographic Data	**Group**	**Mean**	**S.D**	**F**	**Sig.**	**Eta sq**
Competency Enablement & Years of Professional Experience	None N=23	4.16	.53	2.68	.081	.121
	4 yrs & less N=12	3.67	.75			
	5 yrs & more N=7	3.93	.52			

Summary of Results of Relationships between Enablement and Demographic Variables

Seven sets of demographic data were examined in order to consider the relationships between demographic variables and the extent to which participants perceived that they were enabled to develop competencies by completing the L&B course. Results indicated that there were no significant differences (using a significance level of $p < .05$) between perceived enablement levels and demographic variables. When effect sizes were considered, the following were indicated:

(a) Years of professional experience may be worth considering as a potential influential factor in students' perceptions of being enabled to develop competencies.

(b) There was the potential for small but non-significant effects of competency enablement on each of the following: educational sector, years of RTLB experience and years of mainstream teaching experience;
(c) Perceived competency enablement was not influenced by years of SEN experience, levels of academic qualifications or age of participants.

Competency Enablement and Programme Variables

Three programme variables were analysed using the Pearson product-moment correlation coefficient. The relationships examined were between the following: (1) competency enablement and competency importance; (2) competency enablement and online student engagement data, including (a) enablement and the number of participant views of course materials, including discussion forums, on the website and (b) enablement and the number of participant posts on the course website; (3) competency enablement and participant academic grades.

In interpreting the value of Pearson correlations (r) the guidelines suggested in Pallant (2001) were used, with r = 0.10 to 0.29 or r = -0.10 to -0.29 described as a 'small' correlation; r = 0.30 to 0.49 or r = -0.30 to -0.49 described as a 'medium' correlation; r = 0.50 to 1.0 or r = -0.50 to -1.0 described as a 'large' correlation.

(1) Competency Enablement and Competency Importance

The first of the programme variables examined in the exploration of the factors that may be correlated with participants' perceived competency enablement, was the perceived importance of competencies. In all four courses of the programme, there was found to be a positive correlation between the extent to which participants considered themselves to be enabled to develop competencies and how important they

considered the competencies to be (see table 4.20 below). In the Core course and in the Programme overall these correlations were large (N=39, r=.54) and (N=39, r=.58) respectively, with high levels of enablement associated with high levels of competency importance. For the L&B, EBIP and Practicum courses results indicated medium correlations (N=42, r=.38); (N=42, r=.45) and (N=42, r=.46) respectively, again with high levels of enablement associated with high levels of importance.

Table 4.20. Correlations Summary: Enablement and Importance

	Course	N	R	% of Variance Shared	P value
Competency Enablement and Competency Importance	L & B	42	.38	14.59	.013*
	Core	39	.54	29.05	<.001**
	EBIP	42	.45	20.43	.003**
	Practicum	42	.46	21.44	.002**
	Overall Programme	39	.58	33.76	<.001**

Key: * = p < .05
** = p < .01

These results suggest that the more important participants considered the competencies, the better enabled they considered themselves to have been enabled by the programme to develop these competencies.

(2) Competency Enablement and Online Student Engagement (participant views and participant posts)

Next, consideration was given to whether levels of online student engagement may have been a factor in the extent to which participants perceived that they were enabled to develop competencies. To this end, two measures of online student engagement were analyzed (a) data on the frequency with which participants viewed the online course material, including discussion forums, was scrutinized and (b) the number of

posts that participants made on the site was considered. Posts comprised, for example, of student responses to content specific activities and of interactions in which questions were asked of and answered by course lecturers, tutors or peers.

Participant Views of Course Material

The first measure of online engagement considered was participant views of the course materials, including discussion forums and activities. The Core course site was viewed most often (mean 3,456) while the Practicum course site was viewed least often (mean 1,366) (see Table 4.21 below).

Table 4.21. Student Views of Programme Website for the Four Courses

Course	N	Range of numbers of Views	Average number of Views
L&B	33	893-7320	2852
Core	31	1563-8304	3456
EBIP	33	723-6778	2288
Practicum	33	414-3286	1326

Enablement and participant views of course materials on the website

In the relationship between enablement and the number of times participants viewed course materials, results indicated that there were positive correlations across the four courses in the programme (see Table 4.22 below). Medium correlations (Pallant, 2001) were indicated between these two variables in the Core (N=31, r=.36), EBIP (N=31, r=.43) and Practicum (N=31, r=.49) courses with participants who viewed course materials more often considering themselves to be better enabled to develop course competencies. In the L&B course this correlation was small (Pallant, 2001) and the p value did not reach statistical significance (N=33, r=.24).

Table 4.22. Enablement and Participant Views of Course Materials

	Course	N	R	% of variance shared	P value
Competency Enablement and Course Views	L&B	33	.24	5.90	.174
	Core	31	.36	12.96	.047*
	EBIP	31	.43	18.84	.015*
	Practicum	31	.49	24.01	.005**
	Overall Programme	31	.45	19.98	.012*

Key: * = p < .05
** = p < .01

Overall, these correlations suggest that the more participants viewed course materials on the course website, the better enabled they considered they were to develop course competencies, although this trend was not significant for the L&B course.

Participant posts on course website

The second measure of online engagement considered was the number of posts students made on the website. The largest number of posts was made in the EBIP course (range between 60 and 841 and mean 225). The fewest number of posts were made in the Practicum course (range between 4 and 152 and mean 44) (see Table 4.23 below).

Table 4.23. Student Posts on Course Website

Course	N	Range of Posts	Mean no. of Posts
L&B	33	43-324	141
Core	31	72-294	166
EBIP	33	60-841	225
Practicum	33	4-152	44

Competency enablement and participant posts on the course website

In the examination of the relationship between enablement and the number of posts to the website made by participants in the L&B course the size of the value of the correlation (N=33, r=-.04) was below the value at which a small correlation might be indicated (Pallant, 2001). There was a small correlation between competency enablement and posts in both the EBIP (N=31, r=.13) and Practicum (N=31, r=.20) courses. In contrast, there was a medium correlation (Pallant, 2001) indicated between competency enablement and posts in the Core course. However, the p value indicated that this correlation did not quite reach significance at the 0.05 level (N=31, r=.35). Overall Programme results also suggested a medium correlation between the two variables with higher levels of enablement associated with a greater number of posts. Again, however, the p value did not reach significance at the 0.05 level (r =.30) (see Table 4.24 below).

Table 4.24. Competency Enablement and Participant Posts on Course Website

	Course	**N**	**r**	**% of variance shared**	**P value**
Competency Enablement and Course Posts	L&B	33	-.04	0.19	.174
	Core	31	.35	12.39	.052
	EBIP	31	.13	1.59	.501
	Practicum	31	.20	4.12	.274
	Overall Prog.	31	.30	8.76	.106

Overall, these relationships suggest that the number of posts participants made on the course website may be worth some consideration as a potential factor in their perceptions of how well enabled they were to develop competencies, but small

correlation values in some courses and the lack of overall statistical significance suggests that this is a tentative finding.

(3) Competency enablement and participant academic grades

The third within-course variable examined in relation to competency enablement was student academic grades. Grades were examined using descriptive statistics (refer to Table 4.25 below) and were then correlated with enablement.

Table 4.25. Participant Academic Grades

Course	N	Range of Grades	Mean Grade
L&B	31	58% - 97%	81%
Core	31	72% - 95%	84%
EBIP	31	58% - 97%	80%
Practicum	31	69% - 99%	84%
Overall Programme	31	58% - 97%	83%

The average academic grades for all four courses were between 80% and 84% with the greatest range of grades in the L&B and EBIP courses (both between 58% and 97%).

When participant academic grades were correlated with enablement results indicated that in two of the courses, L&B and Core, the sizes of the value of the correlation (N=33, r=-.04) and (N=31, r=.04) respectively were below the value at which a small correlation might be indicated (Pallant, 2001). In the case of the EBIP (N=31, r=.37) and Practicum (N=31, r=.29) courses, results indicated medium correlations, with higher levels of perceived enablement associated with higher grades. In the programme overall there was a small correlation (N= 31, r=.23) between the extent to which participants considered they were enabled to develop competencies and the grades that they achieved. Only in the EBIP course did the correlation between enablement and grades reach statistical significance.

Table 4.26. Correlations Summary: Competency Enablement and Participant Academic Grades

	Course	N	r	% of variance shared	P value
Competency Enablement and Participant Grades	L&B	33	.04	0.20	.802
	Core	31	.04	0.20	.808
	EBIP	31	.37	14.06	.038*
	Practicum	31	.29	8.24	.117
	Overall Programme	31	.23	5.34	.210

Key: * = p<.05

Overall, these correlations suggest that participants who gained higher academic grades may have perceived themselves to be better enabled to develop competencies than those with lower grades, although small correlation values in some courses and the lack of overall statistical significance suggests that this is a tentative finding.

Summary of Results of Relationships between Competency Enablement and Programme Variables

Three programme variables were examined in relation to the extent to which participants considered that they were enabled to develop competencies. Results indicated that:

(a) the more important participants considered the competencies, the better enabled they considered they were to develop these competencies.

(b) the more participants viewed course materials on the course website, the better enabled they considered they were to develop course competencies.

(c) the number of posts participants made on the course website and the academic grades gained by students may be worth some consideration as potential factors in

their perceptions of how well enabled they were to develop competencies although only in the correlation between academic grades and EBIP enablement was there a statistical significance correlation.

Summary of Key Findings of Quantitative Data in Relation to Research Questions

To what extent were the programme competencies considered important to the professional work of participants?

All programme competencies were considered by participants to be of high importance to their professional work. On the 5-point rating scale, the mean overall rating for the importance of competencies was between 4.26 and 4.93 with the highest mean importance ratings being given to the competencies in the year two Practicum course (4.84), the second highest for the L & B course (4.67), and the lowest mean ratings given to the Core (4.63) and the EBIP (4.63) courses.

To what extent did participants consider that they were enabled to develop competencies?

Participants generally considered themselves to be well enabled to develop programme competencies. On the 5-point rating scale, the mean rating for the extent to which participants considered that they were enabled to develop competencies was between 3.46 and 4.62, with the highest levels of enablement associated with the competencies in the Practicum course. Average enablement ratings were also high in the other three courses of the programme, with Core and EBIP course mean ratings of 4.19 and an L&B course mean rating of 3.98.

Results from the analyses of demographic variables generally suggest that the following demographic characteristics were not associated with significantly different levels of perceived competency enablement: years of SEN teaching experience; levels

of academic qualifications; age of participants; educational sector in which participants worked; and years of mainstream teaching experience. Years of professional experience and years of RTLB experience however, may be worth considering as a potential influential factor in students' perceptions of being enabled to develop competencies because of their larger effect sizes.

Results from programme variables analysed indicated that factors such as online participation and the perceived importance of competencies to the work of participants may have been factors in perceptions of competency enablement. Although these results give some indication of some of the factors that may have been associated with participant competency enablement, research question three, "what were the factors that acted as barriers to and enablers of competency development", is more directly addressed in the qualitative data analysis below.

Results of Qualitative Data Analysis

Research Question Three – Factors that were considered to be Enablers of or Barriers to Competency Development

In this section on qualitative data analysis, eighteen themes relevant to either barriers to competency development or enablers of competency development are first discussed. Following this, five overarching themes are presented. These five overarching themes are important because of their relevance to competency development from both the perspectives of being potential enablers of, and potential barriers to competency development.

Barriers to and Enablers of Competency Development

Table 4.27 below provides an overview of the seventeen themes that emerged from the six focus group interviews conducted as being relevant to being either enablers of

competency development or barriers to that development. Within these seventeen themes, ten were identified as barriers to competency development, while seven were identified as enablers of competency development.

Table 4.27. Enablers of and Barriers to Competency Development

	Barriers	Enablers
1	Identifiable gaps in course content	High quality course content and materials
2	Lack of pre-requisite knowledge, skills and experience	Readily available and accessible supports
3	Demands associated with completing assignments	Flexible and accessible learning options
4	Demands associated with programme workload	Relevant and useful assignments and feedback
5	Unclear course expectations	Effective time management, personal organization and attitudes
6	Competing work-study pressures	Pre-requisite knowledge, skills and experience
7	Complex course structure and organisation	Unimpeded access to appropriate technology
8	Impeded access to technology	
9	Isolation	
10	Family illness	

In the following paragraphs, the ten barriers to competency development are discussed in turn.

Barriers to Competency Development

(1) Identifiable gaps in course content

In five of the six groups participants considered that there was a lack of in-depth materials on some topics and that this was a barrier to competency development. Some participants also considered that a more appropriate balance of materials with regard to developing cultural competencies would have been useful in facilitating competency development. These two issues are discussed further below.

(a) More emphasis on new initiatives and issues of particular relevance to practice

One group considered that further opportunities to consider new Ministry of Education initiatives, such as Gateway, for example, would have been helpful.

Participants considered too that more opportunities for further focus on addressing students' behavioural issues and on assessment, particularly in relation to functional behavior assessment, and on dyslexia would also have been useful as these were major focuses of their practice in schools. In addition, two groups considered that further attention to counselling skills and to the inter-personal skills needed to build relationships in order to facilitate "tricky conversations" with parents and professionals, would have been helpful in supporting competency development. These groups stressed that having good listening skills was considered critical to their role as RTLB.

(b) Balance of emphasis on cultural issues

In two groups participants noted that more material on the needs of Pasifika students was needed, including information about Ministry of Education resources that they might expect to be available in schools in relation to these students. These groups also considered that Māori cultural issues, although important, were sometimes unnecessarily repeatedly addressed in sections of the programme, leading to some frustration when, for example, issues that had already been addressed in the Core course were again focused on in the L&B course. One participant commented, for example, that "getting double doses all the time" seemed unnecessary. Another participant, who also noted the lack of focus on other cultures, including Pasifika cultures, commented that she felt that Māori cultural issues were overemphasized and always being, "chucked down my throat". Another participant in the same group disagreed about the Māori emphasis being too much.

It must be noted however, that another group of participants commented that there was not too much focus on Māori issues in the programme and that material provided enhanced competency development. A further group considered that more

emphasis on Māori cultural perspectives and understanding, by way of introducing a visit to a marae (a traditional Māori setting) into the programme, would have been useful to competency development.

(2) Lack of pre-requisite knowledge, skills and experience

In five of the six focus group interviews participants pointed to inadequate prior knowledge as one of the factors that was a barrier to competency development. This lack of prior knowledge related to their unfamiliarity with the expectations of post-graduate study; not knowing what course content to select; lack of skills and knowledge relevant to the RTLB role; lack of knowledge of the Core course and, inadequate knowledge and experience with the technology of online learning. These factors are discussed below.

(a) Unfamiliarity with the expectations of post-graduate study

Many participants considered that the length of time that they had been away from any kind of academic study and their lack of knowledge of what was involved in post-graduate study was a disadvantage to them. They reported that there was a big gap between the skills that were required when they were at university, for some participants over thirty years prior, and the skills required for effective completion of this post-graduate programme. Some participants indicated that they experienced difficulties coming to terms with some of key academic language in the programme, not really understanding, for example, what was required when they were asked to 'demonstrate' their understanding of a particular issue. They also reported not having any knowledge of APA referencing guidelines that they were required to adhere to in assignment writing and not having any understanding of, or experience with, what was required in the preparation of a literature review.

(b) Not knowing what course content to select

Participants in five out of the six groups, reported experiencing difficulties with taking responsibility for selecting material with which it was most useful to engage in order to achieve their personalized goals. Articulating the views of others, one participant explained, for example, that, "I didn't know what I didn't know". This led to hesitation and uncertainty. Participants considered that in the initial stages of the programme they generally attempted to cover too much of the online material available, rather than being more selective, explaining that one of the reasons for this was their desire to do well within the framework of a programme in which there were many choices and possibilities for learning. Participants reported that once they recognized that they could not successfully engage with all of the course material available on the site, and they became more confident and skilled in selecting material that was most appropriate for their own learning needs, they were better able to develop competencies.

(c) Lack of skills and knowledge relevant to the RTLB role

One group considered that lack of skills and knowledge relevant to the RTLB role impacted on their ability to take on board some of the new learning from the programme and so acted as a barrier to competency development. Participants considered that not having had a good induction into the RTLB service or not having the opportunity to be surrounded by the examples of good practice that could be provided though a supportive cluster framework, made it more difficult to achieve programme competencies.

(d) Lack of knowledge of Core course materials

One participant, who had been exempt from the Core course because of previous training, considered that not having engaged in materials presented in the Core course

during the first year was a disadvantage to developing competencies during the second year of the programme.

(e) Inadequate knowledge and experience with technology

Participants' attitudes to the impact of technology on their competency development differed. The valuable role that technology plays in a modern learning environment and the importance of acquiring good skills in utilizing the tools of online technology were acknowledged. However, many participants considered that their lack of knowledge and experience with technology were a barrier to competency development in the programme. Some noted their lack of skill with technology as a "massive" barrier and reported having "hated My Portfolio". They considered that there was too much content related learning in the programme to invest the time necessary to up-skill sufficiently in the required technology. Some students reported feeling "inept" and distressed by the technological demands of the programme, considering that the opportunities provided by staff for students to learn the skills they needed were insufficient. Participants commented that they appreciated being given the choice of submitting their work in ways other than through the avenue of My Portfolio.

One group of participants, however, considered that their lack of knowledge with technology was only a barrier to their competency development in the initial stages of the programme and, although acquiring technological skills was a considerable undertaking, once they had gained the skills to use the technology effectively, that knowledge was "brilliant", saving them time and enhancing competency development.

(3) Demands associated with completing assignments

In all six of the focus group interviews participants commented on the demands of assignments that sometimes impeded aspects of competency development. Participants considered that the investment of time needed to complete the assignments at a high level necessitated neglecting other aspects of their work within the courses, particularly as they needed to address two courses concurrently in both the first and second years of the programme. It was considered that attention became directed to the assignments with the result that some competencies were addressed only superficially and that the balance between assignment work and work within the six domains of the first year papers did not allow for sufficient emphasis on domain work.

Two assignments in particular were mentioned in relation to the issue of over-demanding assignments. Many participants identified their second L&B assignment as a particularly demanding one. This assignment involved the writing of a literature review for the first section and the preparation of a professional development day for a group of professionals in the second part of the assignment. Although some participants commented on how much they enjoyed the assignment and its value in their professional work, many found that it was simply too lengthy, with too many different components to complete. Some participants also commented on the large amount of prior knowledge needed for completing this assignment in relation, for example, to the skills needed for academic writing and completing a literature review and for using accurate APA referencing. Some participants considered that they needed more scaffolding in order to develop the skills needed for completing the assignment properly, with one participant commenting that she had never heard of a literature review before.

The second assignment mentioned by some participants as one in which assignment demands impeded aspects of competency development was an EBIP assignment. Many considered that this assignment caused undue stress that acted as a barrier to competency development. The assignment engaged participants across the five endorsements of the programme in a collaborative consultation and partnership project. Several reasons were given for the undue stress involved in completing this work including organizational factors, such as the bringing together of groups of diverse professionals who did not know each other to complete an assignment that was allocated 35% of the total course grade. Others considered that further feedback from staff was needed during this assignment process in order to support and monitor group engagement.

(4) Demands associated with programme workload

In all six groups, participants commented on the very high programme workload and the time needed to complete the courses and thereby develop competencies adequately. Participants pointed to the difficulties of balancing family life with work and programme demands, with many finding it necessary to work through holiday periods. Apart from the workload involved in the assignments, as discussed above, it was noted that in the early stages of the L&B course participants perceived that all of the domain activities and readings for both first year courses were compulsory and that this was a particularly difficult period. Not only was there the work involved in these for two concurrently running courses, but participants also found that they got confused about which activities were for which of the two courses.

(5) Unclear course expectations

In five out of the six groups, participants considered that unclear expectations were a barrier to their competency development, indicating that these issues of unclear

expectations were related to assignments as well as to compulsory course material and online engagement. These factors are discussed below.

(a) Unclear assignment expectations

Participants commented that because of the general pressure of their study commitments, even seemingly minor issues, in relation to assignment expectations, impacted their progress towards developing competencies. One such issue, for example, arose from what was in fact a typing error in one section of the programme website in which an incorrect assignment submission date was given. Participants reported that this error caused confusion and uncertainty. They considered too that assignment 'goal post changes' were an issue, commenting that in one particular assignment in the L&B course it was not made clear to students that there was an option to prepare the assignment with a peer or group of peers. Therefore, when some students asked if they could do this and were given permission to do so, others considered themselves to be disadvantaged. Participants also considered that their attention was not sufficiently drawn to the marking schedule to be applied to assignments and the percentage weighting of various components of the assignment. This led to students focusing insufficiently on the most critical aspects of assignments. In addition, one group noted that a lack of assignment exemplars, made it more difficult for students to be clear about the assignment expectations.

(b) Unclear engagement expectations

Participants considered that expectations regarding online engagement were unclear. They reported that, 'gold post changing', in relation to the course material it was compulsory for them to engage with, impinged on their competency development. Some activities, for example, which were signaled as compulsory on the website during the early stages of the programme were later re-categorised as optional.

Participants reported that changes such as these resulted in confusion and in planning time being wasted.

Participants also reported that they were unclear about the level of online engagement that was expected of them in terms, for example, of the number of posts to the website activity and discussion forums that it was compulsory for them to make. As one participant explained, although initially she believed that students had to be on the website and posting regularly, it was not until nearly the end of the year that she realized that the only criterion for passing the programme, was to achieve a pass mark for the assignments. This lack of clarity, participants considered, led them to invest time in forum engagement that may have been better invested in activities more closely related to their competency development.

(6) Competing work-study pressures

Because of the part-time nature of the programme and the fact that participants were all committed to demanding professional roles, participants in three of the groups considered that the pressure of their professional roles impacted on competency development. Participants reported that the pressure of their heavy professional workloads was compounded by the transformation of the RTLB service being undertaken by the Ministry of Education, which came into effect at the start of students' second year of study. The transformation brought with it a period of rapid change in the RTLB service, impacting participants' study as they adjusted to change and uncertainty within their working context. Participants also reported that, heavy workloads and high levels of professional commitment, resulted in their using some of the time that they had been allocated by the Ministry for study, in order to meet their job commitments. Participants did not want, "to let the kids down". Participants considered that because some senior colleagues and managers did not have an

understanding of the workload involved in the programme, workloads were sometimes not reduced to manageable levels for participants and competency development was compromised.

One group particularly noted that competing work-study demands were further exacerbated in situations where a Ministry of Education study award had not been awarded as this meant that there was no access to study time from employers.

(7) Complex course structure and organisation

Organizational factors were raised in all six interviews as barriers to competency development. In total fourteen organizational factors were identified. These are discussed below. The first five factors (*a* to *e* below) emerged from two or more of the interviews while the following nine factors (*f* to *n* below) emerged in only one out of six focus group interviews. Factors that emerged from two are more groups were as follows:

(a) concurrent first year courses;

(b) website navigation;

(c) inappropriate mentor allocation;

(d) unhelpful assignment submission dates;

(e) block course timing and content.

The additional nine organizational factors that participants considered as impacting on competency development and that emerged in only one out of six focus groups included:

(f) unavailability of some course domains for student viewing on the website at start of the year

(g) insufficient opportunities for pastoral care

(h) inadequate advice and guidance during the second year of the programme

(i) poor visual quality of some of the resources

(j) lack of access to marked peer assignments

(k) absence of hard copy course materials

(l) duplication of material across courses

(m) inadequate recognition of substantial technology learning involved in programme

(n) marking feedback delay and lack of familiarity with markers.

All of the fourteen organisational factors are discussed below.

Organizational factors *a* to *e* below are those that were identified in two or more focus group interviews.

(a) Concurrent first year courses

In four of the focus group interviews participants noted the concurrent running of the two first year courses (Core and L&B) as a barrier to their competency development, one participant commenting that this made the "massive" workload "on-going and full on". Participants considered that having to attend to these two courses simultaneously created pressure and confusion as they were forced to transfer their attention from one to the other rapidly and frequently as they sought to meet assignment deadlines. Participants reported that this created a fear of missing something that was crucial in one or other of the courses. Participants reported that they would rather have focused intensively on one paper in the first half of the year and then on the other paper in the second half of the year.

(b) Website navigation

In three of the interviews, participants discussed the difficulties of effectively navigating the large and complex discussion forums and course content domains. As students sought to clarify expectations and course tutors sought to respond to these student needs, posts on the website and discussion threads often became numerous,

making it difficult for participants to quickly retrieve the information that they sought. In addition, some participants considered that some students posted material in which ideas were not concisely expressed, making it more difficult and time consuming to extract key information. It was also considered that navigation of discussion forums was further complicated by the presence of numerous student posts that were irrelevant and more suitable to Facebook than to the course site. This caused frustration as time could be wasted in this process.

In addition to issues with the cumbersome discussion forums some participants considered that inconsistencies in the way in which different domains of the same course were presented made it more difficult to find material effectively.

(c) Inappropriate mentor allocation

In two groups participants considered that the way in which mentors were allocated to students in the practicum paper was a barrier to their competency development, commenting that the system did not work at all well. One group was particularly animated about this barrier explaining that mentors did not know individual students or the context of their work, making a meaningful and productive relationship difficult.

(d) Unhelpful assignment submission dates

In two groups participants considered that unhelpful assignment submission dates impacted on competency development. One group noted that while some assignments were due, for example, on a Friday, it would have been useful to allow the weekend for completing work. They considered this important particularly because of the part time nature of the study as well as participants' big job commitments during the week. Both groups that raised the issue of assignment dates considered that assignment dates across the two first year courses were not sufficiently staggered. Also, that the rapid

transfer of focus from completing the assignment for one course submission deadline to completing the assignment for the other course submission deadline impeded competency development.

(e) Block course timing and content

Timing

One group considered that the second block course came too late in the year to effectively support competency development and assignment completion. This was because, following the block course, three assignments were due within a very short period of time. The final assignment in both of the year one courses was, in each case, the assignment that was worth the largest proportion of marks for that course. Participants considered that having the second block course earlier in the year would have given them better opportunities for preparation for these big assignments.

Content

One group also considered that the content of the block courses, and in particular the workshop sessions, was not linked clearly enough to the course competencies and that it would have been helpful for these links to be made explicit. Another group considered that, in support of the development of cultural competencies, it would have been helpful to give block course attendees the opportunity to visit a marae. It was considered that it would have been useful if those who were already away from their home city for the block course, to spend a night on the marae, with those students who had already engaged in this type of activity in the past providing support for those for whom it was a new experience.

Organizational factors *f* to *n* below were those identified in only one out of six focus groups.

(f) Unavailability of some domains for student viewing at start of year

In one group, participants considered that not having all of the content domains opened for students to view from the start of each course, impacted their ability to gain a full understanding of what was involved in that course as a whole. Participants indicated that, although they understood that the content that had not been opened for viewing was content that was not to be covered until later in the year, they considered that not being able to view and access all of the course content from the start of the year, hampered their ability to organize their thoughts about and planning for the course as a whole and, in so doing, acted as a barrier to their development of competencies.

(g) Insufficient opportunities for pastoral care

Participants indicated that the large size of the group and the absence of an identified staff member assigned from the start of the programme to support a small group of students, made access to needed pastoral care difficult. This absence of assigned staff members, who could provide a 'tutorial type' environment, made competency development for students in need of additional support more difficult. It was considered that a small proportion of students, for example those who may have been experiencing health issues, would have benefited from opportunities to build relationships with staff in a small group situation from the start of the course. Such facilities as the ability to talk to a staff member by phone or Skype at the end of the week would have been helpful. Although as the year progressed students in need of additional support may have been able to develop these staff relationships, having clearer access to opportunities for individual support from the start of the programme would have been useful in enhancing competency development.

One participant also considered that having two block courses per year did not give enough opportunities for face-to-face relationship building with staff and peers that they considered important and that further emphasis on staff holding face to face meetings with small groups of students in their hometown area would have been beneficial to enabling competency development.

(h) Inadequate guidance during second year of the programme

Participants considered that further interaction with and guidance from staff during the second year of the programme when they were involved in the practicum component of the programme would have enabled better competency development. Following the very intensive and content rich courses in the first year in which they interacted with staff and course peers frequently, participants reported that during the second year they felt "a little bit lost".

(i) Poor visual quality of some resources

Participants reported that some decisions about which materials they engaged with were made on the basis of the visual quality of the print, with some materials proving too difficult to read. This resulted in some materials not being engaged with even though they may have better supported competency development.

(j) Lack of access to marked peer assignments

It was considered by one group that not being able to access the literature reviews and professional development plans developed by peers as part of the second L&B assignment, adversely affected their own competency development. This was particularly the case because initially students had been informed that the work of others would be made available to them and so students had anticipated access to topic areas different from those that they had studied intensively.

(k) Absence of hard copy materials

One group considered that the complete absence of any hard copy materials was a barrier to competency development. This was particularly true in the case of one participant who had limited access to photocopying facilities and who considered that being able to highlight key points in important readings would have better facilitated competency development. In addition, hard copies of readings could be more easily transported so that engagement with materials was possible even when computer and internet access was not possible. Participants reported that because of the part time nature of the course as well as family commitments, much reading was done while, for example, waiting for children at sporting events. The lack of provision of hard copy materials made study, and so competency development, more challenging.

(l) Duplication of materials

One group considered that the overlap in some course materials across courses was frustrating and counterproductive in the process of competency development. They considered that this was particularly the case in relation to material on cultural awareness and cultural competency.

(m) Inadequate recognition of substantial technology learning involved in programme

One group considered that their substantial competency development in relation to technology was not fully recognized and acknowledged in the programme. This development they considered was a necessary prerequisite in order for them to develop other competencies. This lack of recognition may in itself have acted as a disincentive for developing key skills and so impeded competency development in other areas of the programme that were heavily reliant on technological skill development.

(n) Marking feedback delay and lack of familiarity with markers

Participants considered that not knowing some of the markers who provided feedback on some major assignments was a barrier to their competency development as they had no relationship with these markers and were largely unaware of their roles in the programme. In addition, one participant considered that the length of time it took for students to receive feedback on the work they had done for assignments delayed their reflection on their work and so impeded competency development. Other participants in this group disagreed and considered that, taking into account the number of assignments to be assessed, the time it took for them to be returned was very reasonable.

(8) Impeded access to technology

In two groups participants considered that not having adequate access to appropriate technology was a barrier to competency development. These problems were exacerbated by the disruption to office space that resulted from the transformation of the RTLB service. Participants reported that not having internet access at work during the first year of their study, in addition to poor access to photocopying facilities, were factors that impacted on their study. One group also considered that not having internet access via mobile phone was also a barrier to competency development as this restricted their ability to utilize time effectively in the context of a busy family schedule, for example, when waiting for children taking part in extra curricular activities.

(9) Isolation

Two groups reported that feelings of isolation were barriers to competency development. Where participants worked, for example, in isolated rural areas and were far away from programme peers, “not being able to face-to-face” hampered

competency development. It was considered that this lack of opportunity to discuss course related issues and material with peers and to feel supported by peers in a face-to-face context was a barrier to competency development. These feelings of isolation also occurred in situations where participants were not working as RTLB and so were not part of an RTLB cluster.

One further participant also noted a lack of confidence to participate in online forums resulted in a lack of active engagement with the online community and considered this isolation as a barrier to competency development. The participant's lack of confidence resulted from a concern about online posts remaining on the forum "forever" and worries about whether what they posted would compare favourably to the contributions of others. This participant also expressed the view that a failure to build "solid relationships" with a face-to-face study group or community of practice was also a barrier to competency development.

(10) Family illness

One participant reported that caring for a very ill family member was a barrier to competency development. Although this finding did not constitute a theme that emerged across focus groups, it is still considered significant, so is recorded here.

Enabling Factors in Competency Development

The seven factors identified as being enablers of competency development in the programme are discussed below.

(1) High quality course content and materials

Participants considered the scope of course materials to be excellent commenting, for example, on the range of opportunities for students to explore areas of particular relevance through accessing the numerous links to supplementary material and

exploring references provided. In all six focus groups participants considered that the high quality of the online course materials was an important factor in their competency development and commented on "brilliant" materials that were important, relevant and current and that could be "used and reused" in practice, increasing confidence as a practitioner and developing competencies. This relevance allowed participants to enjoy their engagement with the course content. In the words of one participant, "…I can honestly hand on heart say that there wasn't one thing that wasn't relevant to my job…I enjoyed engaging with it." Participants valued the wide range of expertize from the large team of lecturers that was easily accessible to them in one place, "everyone in their specified field in what they were passionate about". They also appreciated that whereas in a face-to-face lecture setting they might perhaps only retain a small amount of what was actually said by the lecturer, in the online setting, they were able to go back to valuable content as often as needed.

In two groups, participants commented particularly on the value of the materials on cultural issues. Several other aspects of the programme content were also highlighted by participants as being very useful, for example, the emphasis on solution-focused, strengths-based approaches and materials focused on interpersonal as well as inter-professional skills for working with students, teachers and other agencies.

Participants also valued the many references and links provided to additional materials that could be followed up on if they chose to explore a particular topic in further detail commenting that, "there was plenty there to go on….you could get the beginnings of just about anything."

(2) Readily available and accessible supports

Accessing appropriate support emerged as a key enabler in competency development across all six focus groups. The six groups all considered the support of peers and colleagues to be vital, as well as the support of programme staff. Four of the six groups also commented on family support and support from the Ministry of Education as important factors in competency development.

(a) Support of course peers

In all six focus groups most participants considered that the support of a small self-selected group of programme peers, who lived locally, was an important factor in their competency development. It was considered that these face-to-face meetings, in which they were able to exchange a range of views and to ask questions of each other about what they were reading and to discuss course issues, materials and assignments, supported their own growth and learning. Participants considered that these face-to-face opportunities "made a huge difference". In the words of one participant, "the value was getting all the reading from the online component and having that information there but then having a face-to-face discussion with someone and unpacking it…". Participants reported building strong relationships with these course peers. They considered that they could call on each other for help and support when needed and were able to use the individual strengths of study group members to support each other academically as well as emotionally, knowing that "somebody else is going through exactly the same as you are going through". The ability to draw on technical support from a technologically able study buddy was one example of the way in which members of the group were able to access support that enabled competency development. In one group, participants also acknowledged how support

from peers during face-to-face sessions at the block course supported their learning and competency development.

Participants also valued the online support they received and recognized this as a contributor to their own competency development. Participants considered peers to be supportive and affirming of them, enabling them to feel "safe" and confident to ask any question in the knowledge that they would not be made to feel embarrassed by anyone using the site because there was "never a dumb question". They also considered the forum contributions of many of their peers to be useful in their own understanding of course content, commenting that the way some people put things on line, "helped you to understand". Even in the case of one participant who described feeling anxious about posting on the forum because of the 'permanent' nature of posts, access to forums was considered an enabling factor in competency development, as illustrated below.

> "I read all the forums but I would never comment…because you were either scared to put a comment on because you were worried how it would look compared to other people's comments… I read them, I copied them and I included some of their ideas in my work and I chose several people who I knew were A students and I always read their comments."

Most participants considered themselves to be part of an online community and were reassured, in the words of one participant, by "the idea that everybody else was in the same boat and that I wasn't alone". They also considered that good working relationships with peers were particularly important in effectively developing competencies relevant to their inter-professional practice assignment.

(b) Support of work colleagues

Participants reported that having supportive colleagues and cluster managers who understood the demands of the programme was important to competency development. Supportive managers were able to ensure that participants' job caseloads were not excessive and that they were given the study days that had been approved by the Ministry of Education. Supportive cluster managers were also able to ensure that participants were given access to cases that would provide students with appropriate opportunities for their competency development. Participants also reported that managers who were flexible, allowed them to take study days at peak study times, facilitating their effective completion of assignments and enabling competency development. Supportive school staff and principals who were aware of study demands and keen to share ideas where applicable, were also highlighted as enablers of competency development.

(c) Support of programme staff

In all six focus group interviews, participants considered that supportive programme staff were a major enabler in their competency development and believed that if it, "came to the crunch… if we couldn't figure it out, there was someone we could go to." Participants valued the support of staff, who were available in a range of contexts including face-to-face support, online support and personal support via telephone.

Participants considered that the block courses were important opportunities for staff support with technology, commenting on the helpfulness of the university staff and their willingness to take the time to solve technology issues and to explain instructions and demonstrate procedures as often as was needed, enabling students to make progress towards competency development. Participants considered that programme staff made good use of these face-to-face sessions at the block courses as

well as during small regional meetings to provide support and "demystify the technology".

In all six focus groups participants considered that staff attitudes and the high quality of the online support received from programme staff was instrumental in enabling them to develop competencies. Participants considered that staff cultivated a climate in which students felt well supported. Participants also reported that members of staff were very accessible online and responded quickly to any questions asked on the discussion forums or by email, one participant commenting that there was "always that knowledge that lecturers were always there to support online". One participant noted feeling better supported in this online setting and developing better relationships with lecturers than had been the case when involved in a more traditional face-to-face university post graduate programme previously undertaken at another university. Participants considered that the weekly updates that included video updates by lecturers were important as sources of information and in helping them to maintain relationships with lecturers in the online community setting. This in turn supported competency development.

Participants considered that staff attitudes at the block courses also contributed to their feelings of being a part of a supportive community of learners, enabling competency development. In two groups participants specifically reflected, for example, on lecturer accessibility and informal opportunities for interaction such as during shared morning and afternoon tea sessions. They also noted the professionalism of staff in ensuring a culturally safe environment, so that even in challenging situations when culturally sensitive issues were raised, staff ensured that "no-one felt put down".

(d) Support of the Ministry of Education

In all of the six groups it was clear that having study days available played an important role in enabling participants to develop competencies. Participants were appreciative of the financial support of the Ministry of Education for their study and for their acknowledgement of the additional workload that this entailed through their allocation of paid study days.

(e) Support of Family

In four of the six focus groups participants considered emotional as well as practical support from understanding family members to be important to their competency development, acknowledging the sacrifices family members made. One participant commented, for example that, "my husband had to learn how to cook (and) I had to learn how to eat it!" Other participants commented on practical support they received from children who, for example, were able to help with technology and APA referencing. Children also provided encouragement and supported well-being, with one son commenting, "….don't you think you'd better go out somewhere, you've been bent over the computer for a long time!"

(3) Flexible and accessible learning options

In all six focus group interviews participants considered that the accessibility and flexibility of the programme was an enabler of competency development, appreciating both the online accessibility and the opportunities for face-to-face delivery. Participants noted that being able to study at whatever time they wanted and wherever they wanted was a significant factor in their ability to develop competencies as they could fit their study into busy working and family lives at a time and location that best suited them. One participant noted, " I could do it although I lived rurally and was physically isolated".

Participants also considered that the ability to self-direct learning and to develop learning goals that best met their needs was important in competency development. This flexibility enabled participants to take ownership of their learning and to build on prior knowledge, extending learning in the areas most relevant to their needs. Participants considered too that the 'permanent' nature of the online course materials and forums supported their development by taking away the pressure of feeling that everything that they were interested in learning had to be learnt straight away. Some participants commented that following the completion of the programme, they returned to the programme website to re-visit useful materials and benefited from the opportunity to "see it with a different lens each time." Similarly, participants considered that the easy accessibility of the forums allowed them to revisit and reflect on the contributions of others, thereby facilitating their own learning and development.

Although participants highly valued the ability to learn flexibly within the online community, they also considered that the fact that this online component was complemented by face-to-face sessions at block courses and regional meetings was important in their competency development. Face-to-face sessions were considered important ways of developing relationships with peers who they had interacted with online, expanding networks and facilitating learning with, from and about peers and programme staff.

(4) Relevant and useful assignments and feedback

In five out of the six focus group interviews participants considered that assignments in all four of the courses of the programme were highly relevant to their professional work and were important in facilitating competency development and furthering their confidence as professionals. Participants noted that their ability to make choices about

topics within a helpful assignment framework supported self-directed learning in a range of areas of particular interest to them and relevance to their practice. One group reported, for example, that they "loved" the Practicum portfolio structure that encouraged the exploration of topics and issues that they did not know very much about. Another group noted the value of the Core assignment that gave them opportunities to learn from each other's presentations at the block course. Participants commented that constructive lecturer feedback on assignments also supported competency development

(5) Effective time management, personal organization and attitudes

In five out of the six focus groups, participants considered that their own time management, organizational skills and attitudes were enablers of competency development. Participants were clear that effective competency development required the discipline, determination and commitment to make full use of study days, times available at the weekend and during holidays, if needed. For example, one participant explained, "We get our study days, but we do far more".

Some participants reported enjoying and embracing the challenge of the technology from the start of the programme, including learning how to use My Portfolio. Among those who were very challenged by, and fearful of, the technology at the start of the programme, some reported that, by committing time to overcoming their difficulties and through their personal determination to succeed in acquiring the skills, they were able to overcome their initial fears. They considered that the skills that they subsequently developed supported their competency development and enabled them beyond the study. Still other participants reported that although they were unable to acquire the skills necessary for using My Portfolio, they were resilient

and maintained a positive attitude to their work, finding other ways of presenting what they had learned so that they continued to develop competencies.

Participants also pointed to the need to develop skills for being discriminating in relation to selecting content that they engaged with in order to meet their goals. Working "smarter" was considered essential. Participants reported that once they had come to terms with the fact that they could not engage effectively with all of the programme content, they were better able to manage their workloads and to develop competencies. Participants also reported getting better at "sifting through" forum information that was irrelevant to their learning needs and thus freeing up more time for them to focus on competency development.

Participants revealed too that finding individual ways to organize learning supported their development. One group, for example, noted that making a book in which unfamiliar terms were recorded, putting lists of words on the kitchen wall, setting aside specific times in the evening at home for study and setting targets for each study session supported them to develop competencies.

(6) Pre-requisite knowledge, skills and experience

In four of the six interviews participants indicated that good prior knowledge and experiences were enablers of competency development. Participants considered that having good supervision and support from mentors in the field, within the context of their professional roles, enabled them to better develop competencies. Participants also commented that having a good induction into the RTLB job and having some experience in that job were very helpful in developing programme competencies. As one participant who had done the RTLB job for a year prior to training commented with regard to facilitating factors, " I really think having had time to work the job, with a good induction process from my cluster…for me that was huge".

Other factors relevant to prior knowledge were also identified by participants including: having a good understanding of technology and previous experience of online learning; prior experience of post-graduate study providing invaluable understanding of what was required; and, prior training in key areas of professional knowledge, for example, as a counsellor. Participants considered that these types of experiences and the knowledge gained from them were important facilitators of competency enablement.

(7) Unimpeded access to appropriate technology

Two groups noted that improved access to appropriate technology was a significant enabler in competency development. In the case of one group, gaining access to the internet and to appropriate photocopying facilities at work was useful. In the other group three significant enablers were identified. The first was having broadband access at home. The second enabler reported was getting an I-pad, so that pdf files could be saved on the I-pad through a Kindles application. Once material was uploaded to the I-pad, an internet connection was not needed to read it and so the material was portable and time did not have to be spent at the photocopier. This group reported that getting internet access on a cell phone also supported competency development as it increased access to the online community and the materials.

Overarching Themes

Following reflection on the analysis of the ten barriers and seven enablers described above, five overarching themes were identified as emerging from the focus group interviews. These five themes are relevant to competency development from both the perspective of being potential enablers of competency development as well as from the perspective of being potential barriers. These overarching themes relate to: course

content, relevance, clarity and structure; supports; managing time and pressure; pre-requisite knowledge, skills, and experience; and, access to technology. The five overarching themes are presented in Tables 4.28 to 4.32 below.

Table 4.28. Overarching Theme One: Course Content, Relevance, Clarity & Structure

Overarching theme	Barriers	Enablers
COURSE CONTENT, RELEVANCE, CLARITY and STRUCTURE	**1 Identifiable gaps in course content.** *(a) More emphasis on new initiatives and issues of particular relevance to practice.* *(b) balance of emphasis on cultural issues.* **6 Unclear course expectations.** *(a) unclear assignment expectations.* *(b) unclear engagement expectations.* **8 Complex course structure and organisation** *(a)concurrent first year courses* *(b)website navigation* *(c)inappropriate mentor allocation* *(d)unhelpful assignment submission dates* *(e)block course timing and content* *(f) unavailability of some domains for student viewing at start of year* *(g) insufficient opportunities for pastoral care* *(h) inadequate guidance during second year of the programme* *(i) poor visual quality of some resources* *(j) lack of access to marked peer assignments* *(k) absence of hard copy course materials* *(l) duplication of materials* *(m) inadequate recognition of substantial technology learning involved in programme* *(n) marking feedback delay and lack of familiarity with markers*	**1 High quality course content and materials.** **3 Flexible and accessible learning options.** **4 Relevant and useful assignments and feedback.**

Table 4.29. Overarching Theme Two: Supports

Overarching theme	Barriers	Enablers
SUPPORTS	**10 Isolation**	**2 Readily available and accessible supports.** (*a) support of course peers* *(b) support of work colleagues* *(c) support of programme staff.* *(d) support of Ministry of Education* *(e) support of family*

Table 4.30. Overarching Theme Three: Managing Time and Pressure

Overarching theme	Barriers	Enablers
MANAGING TIME and PRESSURE	**4 Demands associated with completing assignments.** **5 Demands associated with programme workload.** **7 Competing work-study pressures** **11 Family illness**	**5 Effective time magement, personal organization and attitudes**

Table 4.31. Overarching Theme Four: Pre-requisite Knowledge, Skills & Experience

Overarching theme	Barriers	Enablers
PRE-REQUISITE KNOWLEDGE, SKILLS and EXPERIENCE	**3 Lack of pre-requisite knowledge, skills and experiences** *(a) unfamiliarity with the expectations of post-graduate study* *(b) not knowing what course content to select* *(b) lack of skills and knowledge relevant to RTLB role* *(c)lack of knowledge of Core course materials* *(d)inadequate knowedge and experience with technology*	**6 Pre-requisite knowledge, skills and experience**

Table 4.32. Overarching Theme Five: Access to Technology

Overarching theme	Barriers	Enablers
ACCESS TO TECHNOLOGY	**9 Impeded access to technology.**	**7 Unimpeded access to appropriate technology.**

In the following chapter these findings are discussed in relation to the literature reviewed earlier in the thesis.

CHAPTER FIVE: DISCUSSION

Rurea taitea, kia toitū, ko tai kākā anake

(Strip away the sapwood and get to the heart of the matter)

This chapter first summarises findings of the current study in relation to each of the three research questions and discusses these findings in relation to relevant literature. The implications for practice are then discussed as well as the limitations of the study. Finally, recommendations for future research are made.

Findings Relevant to Research Question One - To What Extent were Programme Competencies Considered Important to the Professional Work of Participants?

In relation to the first research question, one major finding of this study, that participants considered all programme competencies to be of high importance to their work in the field of learning and behavior difficulties, is discussed first. Next, findings concerning perceived competency importance and the practicum course is addressed, followed by a discussion of perceived competency importance across the five competency clusters of the programme.

Major Finding

A major finding from this study relevant to the first research question was that, in all four courses of the PGDipST(L&B), participants considered programme competencies to be of high importance to their professional work in the field. This finding reinforces the view that achieving close correspondence between competencies addressed in training programmes and the needs of professional working environments can be achieved by adopting a competency-based approach to

education (Herr et al., 1976; Murray, 2009; Sullivan, 1995). This finding highlights the importance of the process by which competencies are generated, as is emphasized by the Council for Exceptional Children (CEC, 2008) in the USA, whose seminal work, *What Every Special Educator Must Know*, brought together the views of thousands of professionals in the field.

It is in line with this focus on utilizing a range of expertise in devising relevant competencies, that the competencies included in the PGDipST(L&B) were developed. The development of competencies for this programme was underpinned by wide-ranging consultation in the search to identify those competencies of greatest importance to the work of RTLB in New Zealand. The consultation process brought together the knowledge and expertise of stakeholders in the field via a national survey conducted across New Zealand. It also included the work of a specialist advisory group, in addition to that of a Māori, Pasifika and multicultural reference group, and the expertise of university specialists from two universities in New Zealand. Contributions from international advisors were also a part of the consultation process. Given the extensiveness of the consultation undertaken, it is useful to know that programme participants agree that the programme competencies selected were highly important to their work as RTLB.

Competency Importance and the Practicum Course

Results also indicated that the course with the highest mean overall ratings for competency importance was the Practicum course, in which participants designed their own learning activities to be carried out in the field in order to address the course competencies. As indicated in the introductory chapter, the competencies addressed in the Practicum course were directly linked to *the Registered Teacher Criteria* (New Zealand Teachers Council, 2010) which specifies the standards that teachers in New

Zealand are required to meet. Study findings therefore support Kleinhenz and Ingvarson (2007) who assert that standards can play a pivotal role in guiding the development of relevant teaching competencies and supporting the growth of teacher practice throughout their careers.

The importance of the practicum component of teacher training programmes has been highlighted in the literature. For example, in a study conducted by Smith & Lev-Ari (2005) in which the views of 480 student teachers were sought, the vast majority of students attributed high importance to the practicum component of their training. In addition, in a recent study by Conderman et al. (2013) who surveyed beginning special educators about their preparation programmes, results showed that participants in that study considered that the practicum component of their programme had the greatest impact on their preparation.

Therefore, the findings of the current study support those of previous relevant literature, although it must be noted that the teachers in this study were experienced practitioners pursuing a post-graduate qualification rather than beginning teachers as in the studies cited above.

Competency Importance within the Five Competency Clusters of the Programme

Findings also indicated that, across each of the five competency clusters of the programme, competencies were considered to be of high importance by participants. Further, within all of the five clusters, the difference between the means for the most important and the least important competencies of each cluster was very small, pointing to the consistently high importance of the competencies identified. Interestingly, apart from the emphasis placed in the PGDipST(L&B) on cultural responsiveness, the five competency clusters of the programme have many similarities to the themes of the six competency standards developed by the CEC for

special educators who had already had initial training and were seeking to take on advanced professional roles (CEC, 2008). In addition, these clusters also have much in common with the five competency themes identified by the Professional and Teacher Development Task Force (PTDTF, 2004) in the USA, again with the exception of the additional emphasis placed in the PGDipST(L&B) on cultural responsiveness. So it is useful to know that competencies identified as important for specialists in the Aotearoa New Zealand, were similar to those identified by stakeholders in other contexts.

Findings Relevant to Research Question Two - To What Extent did Participants Consider that they were Enabled to Develop the Prescribed Competencies?

In relation to research question two, a major finding of the study, that participants considered they were well enabled to develop competencies, is discussed first. Other findings discussed are concerned with the following: perceived competency enablement within the Practicum course; perceived competency enablement within the five competency clusters; and the relevance to perceptions of competency enablement of demographic factors, online engagement, and academic grades achieved by participants.

Major Finding

The major finding in relation to research question two of this study was that participants considered themselves to be well enabled to develop competencies in all four courses of the programme. Further, there were only small differences between mean overall ratings for the four courses within the programme, with the Practicum course gaining a slightly higher mean competency enablement rating, and the L&B course a slightly lower mean competency enablement rating.

This finding is in line with those of Rakap et al. (2014), whose study reported on the perceptions of 33 special education teachers in the USA with regard to their in-service training programme in the field of autism. Results of that study indicated that participants, all of whom completed a programme comprising four web-based courses that were taught within two semesters over a one-year period, significantly increased the levels of competency in each of the six competency areas of their programme.

The results of the present study are, however, somewhat in contrast to those of a study by Lombardi and Hunka (2001) in which the perception of students in relation to 28 special needs competencies were examined. Twenty-five percent of these students, who were coming to the end of their teacher-training programme indicated that they did not consider that they had developed either competence or confidence relevant to the 28 essential special needs competencies focused on in their programme. The contrast in results might be explained by the fact that, although students in the Lombardi and Hunka (2001) study were near to completing their university preparation programme, they were undertaking an initial teacher-training programme and had yet to undertake their internship year. In the case of participants in the present study, however, not only had they completed their training programme, but also their work on the programme was situated in their day-to-day professional work as specialist teachers in the field. These factors may have accounted for participants in this current study feeling better enabled to develop competencies than those in the Lombardi and Hunka (2001) study.

Competency Enablement and the Practicum course

Although it must be noted that the mean difference between the highest and lowest rated courses for competency enablement was small, findings of this study suggest that there was a trend towards participants perceiving themselves to have been best

enabled to develop competencies in the Practicum course. The higher rating of the Practicum course competencies for enablement is consistent with the findings reported above in the section on competency importance. That is, across the four courses of the programme, the Practicum competencies were also rated highest for their importance to the work of participants.

In addition, the more important the competencies were considered, the better enabled to develop those competencies participants considered themselves to be. This finding may be explained by the work of Knowles et al. (2015) who emphasise that one of the key principles of andragogy is the learner's need to know. Adults need to appreciate the importance of the learning being undertaken in order for their learning to be maximized. According to Knowles et al. (2015), adults are more problem-centred rather than subject-centred in their learning and need to be able to immediately apply learning to practice. The context of the Practicum course provided multiple opportunities for such a problem-centred approach in which learning could be applied to practice. In fact, this second year course brought together many components introduced in the other three courses of the programme that are considered important in adult learning. These included self-direction, reflection, collaboration, involvement in communities of learning and practice, and the ability to immediately apply learning to practice (Brockett & Hiemstra, 1991; Cox, 2005; Garrison, 1997; Hara, 2009; Knowles et al., 2015; Lave & Wenger, 1991; Merriam & Bierema, 2014; Tomei, 2010).

The Practicum course involved students in a self-directed process that started with a detailed self-assessment and reflection on their skills with regard to all of the competencies of the course. Participants then planned experiences in the context of their work in the field that would enable them to develop competencies. Also critical

in the development of their practicum experience, was a process of consultation with peers and professionals in the field, as well as programme lecturers and tutors.

The high rating of the practicum component of the programme supports the findings of the Conderman et al. study (2013) in which participants pointed to field-based experiences as providing the most useful learning opportunities of their preparation programmes, by bringing theory and practice together.

Interestingly, however, in the Rakap et al. (2014) study discussed above, one group of participants engaged in two field experience courses in addition to the four courses of the programme, while the other group of students engaged in only the four courses of the programme. Rakap et al. (2014) concluded that, not only did both groups of participants significantly increase their competency, but that there was no significant difference in competency development between the two groups. In this study, however, participants who did not engage in field experience courses were provided with case studies designed to enable them to demonstrate competencies. In addition, participants in the Rakap et al. (2014) study, unlike those in the Conderman et al. (2013) study, were teachers working in the field and therefore had access to opportunities for practical experiences relevant to their study.

It may be that the deliberate construction of relevant case studies by programme tutors in the Rakap et al. study (2014), together with the in-service context of participants' learning, accounted for there not being any significant difference between participants who engaged in a field experience course and those who did not. In the light of findings from the qualitative data of the current study, which suggest that participants considered the high workload of the programme to be a barrier to competency development, it may be useful for programme coordinators to consider whether the provision of case studies might provide a mechanism that

enables students to effectively demonstrate competencies, thereby offering an opportunity to reduce the workload required in the Practicum course.

Competency Enablement within the Five Competency Clusters

When the five clusters of competencies within the programme in this study were considered, results indicated that in all five clusters participants considered themselves to be well enabled to develop competencies. However, a relatively large range of means within some competency clusters, particularly for example within the assessment and intervention cluster, was noted. This suggests that within these clusters participants perceived themselves to have been considerably less well enabled to develop the lowest rated competencies than competencies that were highest rated. Interestingly, a range of mean ratings within competency clusters was also found by Conderman et al. (2013), who pointed to larger mean differences within two out of the nine competency clusters identified in that study. These clusters related to assessment and to collaboration competencies, with the researchers suggesting that within both of these clusters participants considered themselves considerably less well prepared in lower rated competencies than in higher rated competencies.

In contrast, the range of means of competencies within the cultural responsiveness cluster in the current study was small. This is important to note in light of the high importance placed on cultural responsiveness within the Aotearoa New Zealand educational context and within the programme, as discussed in the introductory chapter to this current study.

Competency Enablement and Demographic Characteristics

Demographic characteristics examined in this study included the following: years of special education needs teaching experience; years of RTLB experience; years of mainstream teaching experience; years of relevant professional experience; age of

participants; academic qualifications; and, the educational sector in which participants worked. Findings of the current study suggest that these demographic characteristics were not significantly correlated with the extent to which participants perceived they were enabled to develop competencies. Interestingly, findings in relation to the experience variables and enablement are complex and perhaps somewhat surprising considering that the important role of experience as a resource in adult learning is emphasised in the literature (Knowles et al., 2015; Merriam & Bierema, 2014; Rogers, 1996). This is discussed in more detail below.

Experience and enablement of competencies

As discussed earlier in this thesis, it is important to consider more than statistical significance when considering results, and to take account of effect sizes, in order to detect differences in relationships between variables (Cohen et al. 2011; Pallant, 2001; Smith & Morris, 2015). An examination of effect sizes relevant to perceptions of enablement and the four experience variables examined reveals a complex pattern of results. These are discussed below.

In the case of SEN teaching experience, not only did the correlation between this experience and participants' perceptions of how well they were enabled to develop competencies not reach statistical significance, but also the magnitude of the differences in the means was small and well below the value indicated by a small effect size. This finding suggests that the number of years of SEN teaching experience did not influence participants' perceptions of competency enablement.

In the case of two of the other variables of experience and enablement, however, results were slightly different. In relation to participants' perceptions of their enablement to develop competencies and their years of RTLB experience, and also in relation to their perceptions of enablement and their years of mainstream

experience, small effect sizes were found, indicating a trend towards participants with more years of experience perceiving themselves better enabled to develop competencies than those with fewer years of experience.

When years of relevant other professional experience and perceptions of enablement were considered, however, results were in contrast to the findings on experience and enablement discussed above. Although a statistically significant difference in the means across the three groups with differing years of professional experience other than teaching experience was not quite reached, a moderate effect was indicated with a trend towards participants with no relevant professional experience considering themselves to be better enabled to develop competencies than those with four or fewer years of experience, as well as those with five or more years of professional experience. This is a surprising finding that is in contrast to that of a study reported on by Benitez et al. (2009) who examined the perceptions of 557 teachers in relation to 41 specialist competencies critical to their roles as special educators. Demographic variables were correlated with teachers' perceived levels of preparation to deliver effective services as a result of their training. Results of this study indicated that higher scores on professional experience variables were positively statistically significantly correlated with higher levels of satisfaction with training and preparation to deliver effective services.

The findings of the current study may in fact point to the possibility, discussed in Knowles et al. (2015), of the existence of a complex relationship between experience and learning. Although experience can be a powerful tool in an adult's learning, some experience can also lead to biases and prejudices that may in fact act as barriers to assimilation of new ideas and learning, particularly if these experiences are in conflict with new knowledge and learning. Alternatively, it is also possible that

participants who had entered the programme with more years of professional experience other than teaching experience, may have perceived that it was the benefit of this experience, rather than their participation in the programme, that enabled them to develop competencies. This may explain the finding that those with more professional experience, other than teaching experience, may have perceived themselves to be less well enabled *by the programme* to develop competencies than those with fewer years of other professional experience.

At the same time, it is important to be mindful of the literature that suggests that the benefits of experience can be shared among members of a learning group so that the learning of all members of the group is enriched (Rogers, 1996). This sharing of knowledge and experience that enhances learning within a group situation underpins the concepts of communities of practice (Lave & Wenger, 1991). As discussed in the introductory chapter, an important focus in the PGDipST(L&B) programme was to encourage students to share their experience and expertise as part of the learning process. By more experienced students sharing relevant professional experiences with members of the group who had not had these experiences, however, less experienced participants may have had opportunities to operate at the boundaries of communities of practice, as described by Wenger (2000), where increased stimulation and rich learning is likely to occur. Such opportunities enable less experienced learners to explore ideas at the edge of competence and expand their horizons (Wenger, 2000). It is possible, therefore, that by tapping into the divergent experiences of participants who had other professional experience, learners without that other professional experience were enabled to develop competencies to a greater extent than those with such professional experience. This may have led to the finding

that participants with no relevant other professional experience having considered themselves better enabled that those with this experience.

A range of factors, therefore, may account for the findings in relation to the role of participants' experience in competency enablement. First, it is possible that experience itself could be a barrier to new learning. It is also possible that having less experience than others was compensated for because of the opportunities for students to benefit from the collective experience of the group. In addition, there is a possibility that some participants with more experience may have perceived that, because of the advantages of their experience, the programme itself may not have been the main cause of their competency enablement and therefore they may have perceived themselves to be less well enabled *by the programme* to develop competencies.

Competency Enablement and Online Engagement

Following consideration of two forms of online engagement, findings of this study suggest that online engagement may be a factor in competency enablement. In relation to the first of these forms of online engagement, the number of times participants viewed the course website, findings were that the more participants viewed the website, including, for example, forum discussions and activities, the better enabled to develop competencies they perceived themselves to be. However, in relation to the number of times participants made posts on the website, conclusions need to be more tentative, for reasons explained below.

Competency enablement and views of the website

When correlations between the number of times participants logged on to view the L&B site and their perceptions of enablement to develop competencies were examined, results indicated that there was a small positive correlation, but that this did

not reach statistical significance. In the three other courses of the programme, however, medium level positive correlations were found that all reached statistical significance. Taken together across the whole programme, these results suggest that the more participants viewed course materials, including, for example, forums and activities, the better enabled they considered they were to develop course competencies.

The findings described above are in line with those from previous literature. For example, Dixon (2010, p. 1) asserts that, "…one of the primary components of effective online teaching …is student engagement". In addition, the value of engaging in an e-learning environment that enables learners to access a rich, and geographically boundless learning community, has been emphasized by Garrison (2011) and by Haythornthwaite and Andrews (2011). These authors point to the advantages to students of having access to a text-based learning community that includes asynchronous communication. Such a learning environment provides increased opportunities for students to pay more systematic attention to the views of others, thereby enhancing learning. As was noted in the introductory chapter, participants in the PGDipST(L&B) were actively encouraged to learn 'with, from and about each other' in the online community. It may well be that the more often participants viewed the course website, the more they were able to avail themselves of opportunities for learning with and from others, and consequently, the better enabled to develop competencies they considered themselves to be.

As noted above, however, the positive correlation between views of the L&B course and perceptions of enablement were small and did not reach statistical significance, whereas in the other three courses of the programme medium and statistically significant positive correlations were indicated. It may well be that some

of the factors identified by participants in the focus group interviews, as barriers to competency enablement, could have affected participants more keenly in relation to the L&B course compared to the other three courses. For example, in relation to assignment demands, it emerged that many participants considered that one of the L&B course assignments was particularly demanding and resulted in considerable stress. Factors such as these, that acted as barriers to competency development in the L&B course, may have resulted in participants who viewed the L&B website more often not perceiving themselves to be better enabled than those who viewed the site less often.

Competency enablement and posts on the website

Interestingly, although the importance of developing social presence in an online community is stressed in the literature (Garrison, 2011), there were no statistically significant correlations between the extent to which participants in this study perceived themselves to be enabled to develop competencies and the number of times they made posts on the programme website. In fact, while in the EBIP and Practicum courses, the size of the value of the correlation between these two variables was small, in one course (L&B) the size of the value of the correlation between competency enablement and the number of posts made to the website was below the value at which a small correlation might be indicated. It was only in the Core course that a medium correlation between these variables was indicated.

This finding, of a limited correlation between perceptions of enablement to develop competencies and the number of posts made to the website, may be explained by findings from the focus group interviews. Focus group participants considered that opportunities to read and reflect on the ideas of others that had been posted on the discussion forums were enabling factors in their own competency development. This

perception of competency enablement resulting from reflection on the posts of others was noted even in the case of one participant who was reluctant to post comments on the website themself. Perhaps, therefore, it may have been participants' reading and reflecting on website posts that was more important in their perception of competency enablement than the number of posts that they made.

Competency Enablement and Academic Grades

Findings suggest that participants who gained higher academic grades may have perceived themselves to be better enabled to develop competencies than those with lower grades, although this must be considered a tentative finding. This is because, not only was statistical significance between these two variables reached only in one of the four courses of the programme, but in two courses of the programme, the value of the correlations were below the value at which a small correlation might be indicated. Despite this, however, it should be considered that a medium and statistically significant correlation between academic grades and enablement was indicated for the EBIP course and a medium correlation was also indicated between these two variables for the Practicum course. These mixed findings in relation to academic grades and perceptions of enablement might be accounted for by the fact that the majority of participants achieved high academic grades across all four courses of the programme and therefore some degree of ceiling effect may have been in operation.

Findings Relevant to Research Question Three - What were the Factors that Participants Considered to be Barriers to and Enablers of Competency Development?

In relation to research question three, the major findings of this study were that enablers of and barriers to competency development were related to five overarching themes. These five themes encompass the ten barriers to, as well as the seven enablers of, competency development identified in the six focus group interviews conducted (see Table 4.25 of the Results chapter). These overarching themes comprised: course content, structure, clarity and relevance; supports; managing time and pressure; pre-requisite knowledge, skills and experiences; and, access to technology. Below findings relevant to each of the five overarching themes are discussed in turn.

Overarching Theme One: Course Content, Relevance, Clarity and Structure

Findings relevant to theme one suggest that barriers to competency development included: identifiable gaps in course content; unclear course expectations, and complex course structure. Enablers of competency development included: high quality course materials, flexible and accessible learning options, and relevant and useful course assignments and feedback. Together these barriers and enablers are discussed below as they relate to course content and relevance, course clarity, and course structure.

Course content and relevance

In five out of six focus groups, participants considered that additional materials on some topics would have been helpful to their competency development. Participants suggested, for example, that they would have benefited from further information on recent government initiatives. They also considered that more emphasis on issues such as behavior management, dyslexia, counselling skills, and inter-personal skills

needed for building relationships and having 'tricky conversations' with parents and professionals, would have been helpful. These were considered to be issues that RTLB encountered frequently in their practice. The identification of gaps in course content, relevant to important issues in professional practice, supports the findings of the Conderman et al. (2013) study in which participants reported, for example, that they would have benefited from further emphasis on topics such as working with resistant colleagues.

Despite some gaps being identified by participants, however, the current study found that the high quality of the course content and materials was a factor that enabled the development of competencies. This was identified in all six focus groups, with participants highlighting the scope of materials that were kept current and relevant to practice as important in competency development. Participants noted, for example, the relevance of materials on cultural issues in their development of professional competency. This satisfaction with course materials was clearly echoed by one participant who commented, "…I can honestly hand on heart say that there wasn't one thing that wasn't relevant to my job…I enjoyed engaging with it." These findings are supported in the previous literature, as is noted below.

In their literature review relevant to online and face-to-face instruction, the US Department of Education Office of Planning and Policy Development (2010) noted in its conclusions that student access to additional learning materials was often a feature of online learning and that this may be one of the factors that is advantageous to student learning and development in online conditions. In addition, Smith and Tyler (2011) emphasised that the ease with which curriculum materials can be added to and kept updated in the online environment can be of significant advantage to learners.

Course clarity

Findings of the current study also suggest that participants considered that clarity concerning some course issues was a factor in competency development. Lack of clarity acting as a potential barrier to the competency development of learners is a finding supported in the literature (Gruenbaum, 2010; Merriam & Bierema, 2014). These authors point to the challenges that online learners face when, for example, course assignments and the syllabus to be covered are not clearly defined.

Unclear course expectations were identified as a barrier to competency development in five out of the six focus groups. This related both to unclear assignment expectations and to unclear course engagement expectations. In relation to assignment expectations, for example, participants noted a lack of clarity about whether assignments could be undertaken as a joint project with one or more peers or whether assignments had to be entirely the work of one student. In addition, participants pointed to uncertainty with regard to online participation as a barrier, noting, for example, that although they were encouraged to engage with materials, peers and tutors online, the level of this expected engagement was not specified.

Course structure

Findings suggest that participants considered a number of issues relevant to course structure and organization to have been factors that acted as barriers to their competency development. These included, for example, the concurrent teaching of the two first year courses and difficulties navigating a complex website. Participants reported feeling pressure and confusion as they were forced to quickly transfer their attention from one course site to the other while dealing with the "massive" and "on-going and full on" workload. Participants recounted their issues with navigating large

and complex discussion forums and course content domains that made it difficult and time consuming for them to quickly retrieve important information.

That participants considered course structure issues to be barriers to competency development is a finding supported by previous literature. For example, it is noted that when learners new to e-learning are faced with a situation in which every aspect of the practice and technology of e-learning is new to them, such learners experience a very steep learning curve that may create barriers to learning (Haythornthwaite & Andrews, 2011; Merriam & Bierema, 2014). In addition, Garrison (2011) issues the caution that if the quantity of materials to be assimilated is excessive for students, their approach to learning will result in surface rather than deep learning, thus compromising their progress and development.

Although participants experienced course structures and organization that presented barriers to competency development, findings were that other aspects of the course, such as access to flexible learning options as well as relevant and useful assignments and feedback, were considered to be enablers of competency development. These are discussed below.

In all six focus groups participants identified the flexible nature of the programme as a factor that supported their competency development. The advantages to adult learners of flexible online learning and communication, that is not bound by time or space, are well documented in the literature (Cheung & Hew, 2011; Haythornthwaite & Andrews, 2011; Fishman et al., 2013; Merriam & Bierema, 2014; Vernon-Dotson et al., 2014). For example, Fishman et al. (2013) emphasise the important advantages to learning that can be gained from learners' flexibility to work at their own pace and to spend more time on areas of individual interest and need, while choosing to spend less time on areas in which they have fewer needs.

Participants in the current study considered that online accessibility allowed them to fit their study into busy working and family lives in physical locations that best suited them. One participant commented that, "I could do it although I lived rurally and was physically isolated." Participants also noted that the 'permanent' nature of the site supported on-going development with one participant commenting that she was able to revisit materials several times and "see it with a different lens each time".

Another example of flexibility identified by participants as enabling competency development was the opportunity to self-direct their learning and develop individual learning goals. Participants considered that this was important in supporting them to build on prior knowledge and extend learning and competency development. One participant reported that she "loved" the Practicum portfolio assignment that encouraged the exploration of topics and issues that she did not know much about. These findings are in keeping with the literature that emphasizes the contribution to student learning of flexible structures and processes that encourage self-direction (Brockett & Hiemstra, 1991; Garrison, 1997; Knowles et al., 2015; Merriam & Bierema, 2014; Rogers, 1996; Tomei, 2010). Garrison (1997) concludes that learners' self-management that involves taking responsibility, not only for managing goals, materials and learning strategies, but also for managing complex critical reflection and collaboration processes, is important in realizing deep learning.

Overarching Theme Two: Supports

Findings relevant to theme two suggest that isolation was a barrier to competency development, while having readily available and accessible supports was an enabler of competency development. These issues are discussed below.

Isolation

Findings indicated that most participants valued opportunities to meet with programme peers, who were also professional peers, in face-to-face sessions outside of class times. Where this did not occur, some participants felt isolated and considered that this isolation was a barrier to their competency development. This was the case, for example, when one participant lived and worked in a rural area. Feelings of isolation from the online community, resulting from a lack of confidence to engage actively in the community, were also considered a barrier to competency development. Issues of isolation are recognized in the literature as potential impediments to learning and are discussed in the following paragraphs.

Although several studies have reported similar outcomes for learners in face-to-face, as in online conditions (Fishman et al., 2013; Kocoglu et al., 2011; Thompson et al., 2012), no studies considering how additional and informally arranged time with course and professional peers might support learners in blended learning conditions, were found. It is, however, recognized that there is a drastic reduction of communication cues available to learners in online conditions, such as the absence of facial expression and tone of voice. This absence of cues can impede the building of trust within online learning communities and in turn lead to some learners' feelings of isolation, compromising their learning and development (Garrison, 2011; Haythornthwaite & Andrews, 2011). Where learners are not able to establish 'social presence' in the online community, perhaps because of feelings of isolation or lack of confidence to participate, critical thinking and learning can be compromised (Dixon, 2010; Garrison, 2011; Haythornthwaithe & Andrews, 2011; Lord & Lomicka, 2008).

It is also well recognized that learning occurs when people interact with each other (Knowles et al., 2015; Liu, et al. 2009; Merriam & Bierema, 2014) and that

conditions that allow learners to engage in communities of practice, learning communities and communities of inquiry, can provide useful opportunities for learning and development (Garrison, 2011; Haythornthwaite & Andrews, 2011; Lave & Wenger, 1991). Participants in this current study valued additional opportunities to engage with peers in informal communities of learning and practice and considered that where they were unable to do so, this was a barrier to competency development. In addition, participants considered readily available supports as enablers to competency development. This issue of supports is discussed further in the following paragraphs.

Readily available and accessible supports

In all six focus group interviews participants considered the support of programme peers, professional colleagues and programme instructors to be important enablers of their competency development. In addition, the support of family and of the Ministry of Education also emerged as facilitating factors in competency development.

The importance of a range of supports in enabling adults to succeed in educational contexts, is well recognized in the literature. Rogers (1996), for example, notes that:

> "…periods of intensive study can hardly be carried through without the identification of the support networks existing all around the adult learner, and it is to the advantage of both teacher and student participant to encourage the full exploitation of these supporting factors" (p. 69).

It was clear that the support of a small self-selected group of programme peers, who lived locally, was an important factor in competency development for many participants with one participant reporting, for example, that this, "made a huge

difference". Another participant explained that, "the value was getting all the reading from the online component and having that information there, but then having a face-to-face discussion with someone and unpacking it…".

Participants also considered that social as well as academic supports from the online community enhanced their development of competencies. One participant, for example, commented that engagement in the online community supported "the idea that everybody else was in the same boat and that I wasn't alone". Another participant commented that reading the posts of others on the website, "helped you to understand". Participants valued being able to feel "secure" to ask questions and to exchange ideas in the online environment where they were confident they would not be ridiculed and where there was "never a dumb question".

In addition, participants valued support from programme instructors and considered that the accessibility and responsiveness of staff to their needs supported their competency development. One participant commented on the importance of the security of knowing that there was "always that knowledge that lecturers were always there to support online" while another commented that if it, "came to the crunch…if we couldn't figure it out, there was someone we could go to."

Participants acknowledged too the important role of family members and of the Ministry of Education support in their learning and competency development. One participant commented, for example that, "my husband had to learn how to cook (and) I had to learn how to eat it!" Other participants drew attention, for example, to the role of their children with one pointing to the support of her young son who monitored her wellbeing, commenting on one occasion, "… don't you think you'd better go out somewhere, you've been bent over the computer for a long time!"

The support of the Ministry of Education in providing time and financial support for study was also identified as a contributor to competency development.

The findings of the current study, highlighting issues of support as important factors in competency development, are well supported in the literature. For example, engagement and collaboration with others in a community of practice is recognized in the literature as advantageous to achieving meaningful learning (Knowles et al, 2015; Merriam & Bierema, 2014). Further, it is recognized that a significant advantage offered by the e-learning platform is the opportunity it provides for support in the learning process through collaboration within an online community (Garrison, 2011; Haythornthwaite & Andrews, 2011; Lord & Lomicka, 2008; U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, 2010; Yuen, 2011). In fact, it is by harnessing the potential for meaningful collaboration that the transformative power of e-learning to support the deep and effective learning of adults in higher education settings can be realized (Garrison, 2011; Haythornthwaite & Andrews, 2011).

While Garrison (2011) emphasizes that learning can be enhanced through systematic and critical reflection within a community of inquiry, Dixon (2010) notes that even interactions such as opportunities for students to read the posts of other students, offer valuable support within the learning context. In addition, researchers recognize that social presence, which enables participants to develop trusting relationships, is a key element in supporting the successful learning of students within an online context. Important too in sustaining vibrant learning communities are cognitive presence, that supports critical reflection and engagement with other learners, and teaching presence (Garrison, 2011, Haythornthwaite & Andrews, 2011).

In order for learners to benefit from these multiple forms of support, researchers conclude, it is important that psychological safety is established so that participants will be willing to take risks and try new things as part of the learning and development process (Knowles et al, 2015; O'Neill, 2008; Ryba et al., 2002; Tomei, 2010).

Overarching Theme Three: Managing Time and Pressure

Findings relevant to theme three suggest that barriers to competency development included demands associated with completing assignments, programme workload, competing work-study pressures, and family illness. Enablers of competency development relate to effective time management, personal organization and attitudes to challenges. These factors are discussed below.

In all six focus groups participants considered the high programme workload and assignment demands to be barriers to competency development. Participants considered that these high demands resulted in superficial rather than deep learning in some areas. This potential for workload demands to compromise deep learning is highlighted by Garrison (2011). Further, participants in the current study considered that high workload demands made it difficult to balance the needs of family and work life.

Because of the nature of the programme, with its focus on training in-service teaching professionals, participants were committed to fulfilling demanding professional roles alongside their study. Participants reported, for example, using time that they should have allocated to study to issues at their place of work, with one participant commenting that she did not want, "to let the kids down." Another participant noted that family commitments, specifically as they related to caring for a very ill family member, presented barriers to competency development.

Results also suggested that, in the context of the high programme workload, effective time management and organization, along with positive attitudes, were important enablers of competency development. Participants reported, for example, freeing up study time by "working smarter" and getting better at "sifting through" information on the website. In addition, study aids, like lists on the kitchen wall, along with practices like setting aside specific study times at home, all supported competency development. Findings of this study relevant to managing time and pressure are supported in the literature, as indicated below.

As noted earlier in relation to course structure issues, excessive programme workload can compromise learning with students having to apply superficial rather than critical or deeper approaches to learning (Garrison, 2011). In addition, Rogers (1996) highlights the particular pressures to which adults are subjected because of their competing interests. Very often, for example, education is not the prime concern of adults and their learning can be, "overshadowed by the 'realities' of life" (Rogers, 1996, p. 69). This pressure may be exacerbated in e-learning contexts. Researchers draw attention to the permeation of the internet into all spaces, including home and work spaces (Haythornthwaite & Andrews, 2011; Merriam & Bierema, 2014) resulting in pressure on learners to maintain boundaries in situations when learning is taking place outside of traditional settings. Where, these researchers point out, a student in a lecture can be clearly identified as being involved in a study situation, the signal may be much more difficult for a family member to distinguish when, for example, the learner is operating in an 'invisible' e-space. This difficulty, in establishing clearly demarcated boundaries in the face of widespread online access, may result in conflicts as learners pay attention simultaneously to study as well as to juggling home and work worlds (Haythornthwaite & Andrews, 2011). Findings from

the literature and the current study suggest that, in negotiating these conflicts, learners need to use effective organizational skills in order to set their own boundaries, which may be more difficult in an online course.

Overarching Theme Four: Pre-requisite Knowledge, Skills and Experience

Whereas quantitative data from the current study suggested mixed findings in relation to the variables of experience, as discussed above, results of the qualitative data analysis suggest that a lack of pre-requisite knowledge, skills and experience in some areas were clearly considered barriers to competency development. Participants considered that, for example, unfamiliarity with the expectations of post-graduate study, not knowing what course content to select, lack of skills and knowledge relevant to the RTLB role, lack of knowledge of Core course materials, and, inadequate knowledge and experience with technology, all presented barriers to competency development. On the other hand, having pre-requisite knowledge, skill and experience, for example, in the areas of technology and online learning, were considered enabling factors in competency development.

We are reminded in the literature that for many adults, particularly those who are returning to the role of a student after many years away from formal education, the transition back into this context is a very difficult one (Rogers, 1996; Tomei, 2010). In addition, although the importance of self-direction at all stages of the adult learning process is well recognized (Brockett & Hiemstra, 1991; Garrison, 1997; Knowles et al., 2015; Merriam & Bierema, 2014; Rogers, 1996; Tomei, 2010) it is important too to recognise that not all students are at the same stage of readiness for self-direction (Merriam & Bierema, 2014). Further, it may sometimes be in the best interest of learners to relinquish some control in the learning process, for example, in areas where the learner has a particular lack of knowledge (Brocket & Hiemstra,

1991; Knowles et al., 2015). Garrison (2011) reminds us that students' capacity to be self-directed must always be taken into account and that the learning process must be an ongoing balance between responsibility and control. With these cautions in mind, it is therefore not surprising that some participants reported difficulties with taking responsibility for selecting the course material to best meet their requirements for achieving personalized learning goals.

Most participants in the current study reported not having engaged in university education for many years, some for as long as 30 years. They considered that this lengthy time away from formal academic study resulted in a lack of knowledge of, and uncertainty about, the expectations of academic study, particularly at the post-graduate level. They reported a big gap between the skills that they needed when they were at university years earlier and the skills that were required in the PGDipST(L&B). Participants considered, for example, that not knowing what course content to select in working towards personalized goals, was a barrier to progress. As one participant put it, "I didn't know what I didn't know."

As noted above, some participants considered that lack of knowledge and experience in the RTLB role was also a barrier to competency development. Interestingly, these findings are supported by findings from the quantitative data that suggested a small correlation between years of RTLB experience and perceived competency enablement. In this correlation the trend was towards participants with more years of RTLB experience considering themselves better enabled than those with fewer years of experience.

In addition to the factors discussed above, a further issue was that, where a participant had been exempt from taking the Core course and therefore only completed the L&B course in their first year of study, a lack of knowledge of Core

course content was considered a barrier to competency enablement in the two second year courses – the EBIP course and the Practicum.

With the rapid advancements in technological tools used within the e-learning context (Merriam & Bierema, 2014; Haythornthwaite & Andrews, 2011; Vernon-Dotson, 2014) it is also not surprising that some participants considered challenges with technology to be a barrier to competency development. As discussed earlier, Haythornthwaite and Andrews (2011) issue a caution about the steep learning curve experienced by learners new to the e-learning environment and the dangers of technology becoming a barrier to learning rather than an enabler in the learning process (Haythornthwaite & Andrews, 2011; Merriam & Bierema, 2014; Tappenden, 2011; Vernon-Dotson, 2014). In the e-learning context, assert Haythornthwaite and Andrews (2011, p. 142), there needs to be, "an active process of continuously balancing the social and the technical in the *service of learning"*.

Many participants in the current study reported feeling "inept" in the face of the technological demands of the programme. While some participants considered that technology was only a barrier during the initial stages of the programme, others considered it a more enduring issue, with one participant commenting that, in fact, technology was a "massive" barrier to competency enablement.

Overarching Theme five: Access to Technology

Findings relevant to theme five suggest that impeded access to technology can be a factor in competency development while unimpeded access can be an enabler of competency development. In two focus groups participants considered that disruptions to their office space, resulting in a lack of internet access and unavailability of photocopying facilities, was a barrier to competency development. Others considered that not having mobile phone access to the internet restricted their

ability to communicate with the online community and utilize study time fully in the context of a busy family, for example, while waiting for children engaged in extra-curricular activities.

On the other hand, participants reported that gaining access to high speed internet, rather than having to rely on a dial-up service, was an enabler to competency development. In addition, participants noted that the availability of portable devices, such as an i-pad, on which documents could be saved, reduced the need for internet access and photocopies of resources. They reported that this increased flexibility enabled competency development.

The issue of accessibility to technology impacting educational achievement is one that has received considerable attention in the literature. In the context of a rapidly developing technological society, where access to technology is compromised, exclusion from learning opportunities exist, whereas access to technology, high speed internet and up-to-date and portable devices are advantageous to learning and development (Haythornthwaite & Andrews, 2011; Merriam & Bierema, 2014). In the context of mobile learning, however, although the rapid access that devices such as cellular phones offer can sometimes be useful, Garrison (2011) draws attention to the calls for caution. While using technology on the go may be helpful in brief interactions and where a quick review of information is required, Garrison (2011) points out it may be less helpful in situations that require prolonged deep learning.

Implications for Practice

Implications for practice arising from this study relate mainly to issues relevant to PGDipST(L&B) programme developers and coordinators. However, there are also

important implications for RTLB managers and school principals, policy makers and for Māori in Aotearoa New Zealand.

Implications for University Programme Developers and Coordinators

The key findings from the quantitative component of this research study were that specialist teachers working in the field of learning and behaviour diversity in Aotearoa New Zealand considered that the list of programme competencies addressed in the PGDipST(L&B) programme were highly important to their professional work and considered that the programme was highly enabling to them in developing these competencies. The implications of this are that programme developers have been successful in selecting important competencies as well as in enabling students to develop them, which suggests that the programme should be continued with only minor changes to ensure its continual improvement.

It is important to note that competencies that were considered well enabled included those in the cultural responsiveness cluster. The importance of RTLB in Aotearoa New Zealand developing these competencies has been discussed in both the introduction to this thesis and in the literature review chapter. This finding, therefore, constitutes a major contribution of this study and helps to confirm that important competencies for specialist teachers, including key cultural competencies, can be addressed in the context of a blended learning programme.

A range of implications, arising out of a consideration of both the quantitative and qualitative elements of the study, has been identified. These should be helpful to programme coordinators seeking to improve the training of RTLB. They relate to: prior experience of participants; course content, clarity and structure; ensuring competencies are equally well enabled throughout the programme; and, ensuring appropriate support is made available to students. These issues are discussed below.

Prior experience of participants

Quantitative data indicated that participants considered that they had been well enabled to develop competencies considered relevant to their professional roles irrespective of differences in their ages, levels of academic qualification or years of SEN or mainstream teaching experience. This finding indicates that the programme was successful in meeting the needs of a wide range of learners. However, this is somewhat at odds with findings from the qualitative data which suggest that there were several factors that acted as barriers to competency development. Apparently, in spite of the barriers identified in focus group interviews, participants still perceived that they were well enabled to develop competencies. It is useful for programme coordinators to note that it is possible that, by addressing barriers identified in the focus groups, future programme participants can be even better enabled to develop competencies than those in this current study.

In light of the tentative findings that participants with more years of relevant professional experience, such as experience as psychologists, did not consider themselves to have been as well enabled to develop competencies as those with fewer years of professional experience, as discussed earlier, it would be useful for programme coordinators to recognize that these students may need additional guidance to analyse their learning needs and implement learning plans that best meet these needs. It would also be useful for coordinators to further support these participants to engage in multiple communities of practice so as to ensure that they are able to benefit from divergent ideas and opportunities for extension at the boundaries of communities of practice, as outlined by Wenger (2000).

Course content, clarity and structure

As discussed earlier, the course content of the programme was developed following extensive consultation with a range of stakeholders in the field. Although participants considered that they were well enabled to develop competencies, however, they offered recommendations for adding depth and breadth in some areas. For example, participants suggested further emphasis on recent government initiatives, as well as on assessment, and particularly functional behavior assessment. Also on behavior management, dyslexia, counseling and inter-personal skills, and Pasifika issues. Some participants also suggested adding a component to the programme that supported further understanding of Māori cultural perspectives through the introduction of a visit to or stay on a marae. In the context of the on-going review of the PGDipST(L&B) programme, course coordinators and advisory groups might re-examine course content in order to make informed decisions as to whether further content and activities should be added to the programme in order to address issues raised by participants above.

Although levels of online engagement seem to have been an enabling factor in competency development, with a general trend towards more engaged participants considering themselves better enabled to develop competencies, there was a lack of clarity perceived by participants, with regard to the levels of online engagement necessary for successful completion of the programme. Further specification by programme coordinators about the levels of online engagement required, therefore, would be useful in supporting competency development. Further clarity concerning other important information, for example, assignment expectations, would also be helpful, according to participants.

Also of concern to participants was the structure of the programme that resulted in their having to study two courses simultaneously during their first year of the programme, with many having no background in online learning. Participants considered the learning curve to be very steep and perceived that the heavy workload that resulted was an impediment to competency enablement. The implication of this is that course coordinators consider other forms of course delivery that enable students to focus on one course at a time during their first year of study when many of them are new to online learning. This has in fact already been done and in 2015 the two first year courses have been semesterised so that the Core course is undertaken in semester one and the L & B course is undertaken in semester two.

Findings of this study also indicated that the high programme workload was exacerbated by participants' lack of prior knowledge, partly due to many of these adults having not having engaged in formal academic study for considerable lengths of time. Programme coordinators should consider ways of ensuring that prospective students are able to acquire important prior knowledge before starting their programme. One way of doing this, for example, might be to develop an introductory module for students prior to the commencement of the programme.

Ensuring that all competencies are equally well enabled

Although participants perceived that all competencies in the programme were well enabled, a range of mean enablement scores was notable within some competency clusters. One such competency cluster was the assessment and intervention cluster. It may be useful for programme coordinators to consider whether more attention might be paid to some competency areas, such as assessment and intervention, in order to ensure that participants are equally enabled to develop competencies throughout the programme.

Ensuring appropriate support for students

Establishing and maintaining various support networks, emerged as an important factor in the competency enablement of participants. The implications of this, relevant to programme lecturers and coordinators as well as to students, their peers and their colleagues in the field, are discussed below.

Lecturer support

As discussed earlier, participants considered that that the heavy workload required by the programme was a barrier to competency development. This perception was pervasive among participants despite the self-directed learning approach of the programme that encouraged participants to be selective in relation to the course materials that they engaged with and to choose their own learning goals, as well as to create their own individual learning plans. Many participants encountered difficulties with this process of selection, particularly in the initial stages of the programme. Course coordinators should perhaps reconsider the literature that cautions about the differing stages of readiness of adults for self-directed learning (Merriam & Bierema, 2014). This suggests that adult learners should be supported to become increasingly self-directed in order to maximize their learning, with instructors always seeking to achieve the correct balance between learners' capacity for self-direction and opportunities for self-directed learning (Brocket & Hiemstra, 1991; Garrison, 2011, Knowles et al., 2015; Merriam & Bierema, 2014; Rogers, 1996). In the light of the findings of this present study, therefore, course coordinators could consider offering further guidance and support to learners, particularly in the early stages of the programme, with regard to their selection of learning goals and of the course content with which they engage.

In addition, findings also suggested that participants perceived the Practicum course to be particularly important to their competency development. It is clear too that they highly valued the accessibility of and support from tutors during the programme, as an enabler of competency development. However, participants perceived that lecturer support was considerably diminished during their second year of study in which the Practicum course took place, considering that this reduction in support compromised competency development. Here again, it may be useful for programme coordinators to re-consider the level of support offered to students in the programme, particularly during the Practicum course.

Support from peers and colleagues

Participants highly valued the support of peers and colleagues in addition to support from programme lecturers. In particular, participants valued opportunities to meet regularly face-to-face in small, self-selected groups with programme peers. They considered that such 'study cell' meetings were important not only to their competency development but to their well-being. With this in mind, it may be useful for programme coordinators to consider how they might support and encourage new students to identify peers with whom they might be able to work in face-to-face, small group situations on a regular basis. Students may, for example, be encouraged to identify course peers who live in their geographical area during the first one week course when the whole cohort of students meet face-to-face for the first time.

Since data was collected in 2013, many of the implications discussed above have already been fed back to programme coordinators, for example with regard to competencies that participants considered that they were less well enabled to develop. This has led coordinators to re-examine aspects of the programme and to develop content and implement strategies in order to strengthen identified areas.

Implications for Cluster Managers and School Principals

Participants considered that the support of RTLB cluster managers and school principals was an important enabling factor in their development of programme competencies. Cluster managers and school principals should therefore recognize the importance to schools of RTLB in training developing programme competencies and should also recognize the importance of their role in enabling these RTLB to develop competencies. These educational leaders should take advantage of opportunities to consult with programme directors and coordinators so that they have a full understanding of competencies being addressed and of the workload involved in completing the PGDipST(L&B) so they able to effectively support RTLB while they are undertaking the programme.

It would also be useful for cluster managers to note that quantitative data findings also suggest that there may have been a small trend towards participants with more years of experience as RTLB considering themselves better enabled to develop competencies than those with less experience. This was supported by findings from the qualitative data, with participants perceiving that having experience of working as an RTLB, and having the benefit of a good induction process into the RTLB service, were enabling factors in their competency development. In the light of current government policy requiring all newly appointed RTLB to complete the training programme, managers should consider how soon after appointment new RTLB are required to undertake the training programme and also recognize the role of exposure to a good induction programme within the cluster in supporting newly appointed RTLB to develop competencies during the course of the PGDip(ST) programme.

Implications for Policy Makers

As discussed in the introduction to this study, the RTLB training programme was introduced into Aotearoa New Zealand as part of government policy in order to ensure the effective training of these specialists and improve outcomes for students (Ministry of Education, 1996). Within this context the emphasis on improving outcomes for Māori learners has been discussed (refer to introductory chapter). It is therefore important that policy makers take note of the findings of this study, which suggest that participants considered that PGDipST(L&B) enabled them to develop important competencies and that the support of the Ministry of Education was an important facilitating factor in this competency development. The Ministry of Education should therefore continue to lend their support to RTLB in training and seek to ensure that school principals and RTLB managers are encouraged to provide a network of support in order to facilitate RTLB competency development. The Ministry of Education also needs to continue to support the broader educational community in researching, reviewing and implementing training programmes that build the capacity of schools and teachers to provide effective culturally responsive services to Māori students and their whānau as well as to other learners across Aotearoa New Zealand.

Implications for Māori

Māori communities should recognize that a significant part of the RTLB role is to engage with Māori learners and their whānau in order to enhance student achievement and that RTLB are developing specific cultural competencies considered important in order to fulfill that role. Māori communities should therefore provide guidance and support to RTLB as they seek to develop competencies and encourage whānau to

make full use of the RTLB service in order that Māori children's educational outcomes are enhanced to the maximum extent possible.

Limitations

Several limitations with regard to the current study are acknowledged. These relate to aspects of its design implementation, research procedures and measures. These limitations are discussed in the following paragraphs.

Design Implementation

This study employed a mixed-method sequential design. For various reasons, however, delays in collecting data occurred, with possible implications for the reliability of data collected. Participants completed the PGDipST(L&B) programme in November, 2012. Due to the time required for obtaining ethics approval for this research study and for piloting the questionnaire survey, however, survey data collection did not commence until the end of January, 2013. The original deadline for the collection of survey data was the end of February, 2013. However, this was extended to enable more participants to complete the survey. The final participant response to the survey was collected on April 20th, 2013. Because of this delay participants' memories of their programme experiences may have faded to some extent, thus possibly affecting the reliability or validity of their responses.

Further, following the collection of the survey questionnaire data, initial analysis of the data was conducted before the focus groups were selected. Focus group interviews took some time to organize and were finally conducted between August and November, 2013. Efforts were made to stimulate memories of participants' experiences, for example, by providing lists of competencies to participants prior to the interview and holding pre-interview warm-up conversations with focus groups before starting the interviews. Despite this, however, the time delay

in conducting these interviews and the possibility of participants' memories having faded, may have impacted on the reliability or validity of the data collected.

The sequential design, with participants' selection for the interview phase based on the results of the questionnaire survey, also meant that anonymity could not be offered to those participating in the survey. Although participants were made aware of the purpose of the study (to improve the programme for future professionals) the lack of anonymity at this stage of the study may have influenced some participants to respond in more socially favourable ways. Great care was taken to assure participants of confidentiality and to word questions in such a way as to avoid them feeling professionally vulnerable. This included making it clear that the focus of the survey was on the programme, rather than on participants' achievements. For example, participants were asked, "to what extent did *the course enable you* to develop this competency?" Even with such care taken in wording questions appropriately, some participants may have been hesitant to acknowledge perceiving themselves to be poorly enabled to develop competencies, in light of the lack of anonymity.

Research Procedures

Eighty-one students successfully completed the PGDipST(L&B) by November 2012. Despite the best efforts of the researcher, however, questionnaire data was only received from 42 of these graduates. Although some authors suggest that researchers should be satisfied with a 50 per cent response rate for such surveys (Cohen et al, 2011) it is possible that, with a response rate of only 52 per cent, the data gathered may not be representative of the views of the entire population of graduates.

In addition, it is important to acknowledge that, due to the difficulties of scheduling focus group interviews at times and in places that suited participants, focus

group sizes were small. Four focus groups comprised three participants each and two focus groups comprised two participants each. In total, therefore, 16 of the 42 participants who completed the survey questionnaire took part in focus group interviews. Although small focus groups lend themselves to the possibility of producing more detailed data from each participant, there is also the possibility that they could result in a more limited range of issues being raised (Morgan, 1997). The small size of the focus groups may, therefore, have impacted the richness of the data collected.

Measures

First, as is the case with any measures that rely on self-reported data, such as is the case in this study, a lack of accuracy on the part of participants cannot be ruled out with data possibly affected by participant tendencies to respond in socially favourable ways.

With regard to the questionnaire survey administered in this study, the length of the survey, comprising 68 questions, may have impacted the quality of the data collected. The questionnaire consisted of: ten demographic questions; plus 51 closed questions and four open questions specifically relevant to the competencies in each of the four courses of the programme; as well as three open-ended questions relevant to the programme as a whole. Despite every effort being made to ensure that all questions were clear and easy for participants to answer quickly, as well as to ensure that the survey was divided into sections so as to make it more manageable for participants, there is the possibility that the length of the survey may have been off-putting to some participants. This may have resulted in some graduates losing focus and interest during the course of completing the survey and thus paying less careful attention to some items, thereby reducing the reliability or validity of the data.

It must also be recognised that this study measured participants' perceptions of their enablement to develop competencies rather than measuring their actual levels of performance with regard to competencies. Gaining participants' perspectives provides useful information, however, attaining accurate measures of actual participant performance with regard to competencies would also be useful, although is a task that was beyond the scope of this study. This is addressed in the next section of the chapter in which future research is considered.

In relation to the quantitative data measures, it must be noted that the measures of online engagement used were, in fact, counts of numbers of views of the programme website and participants' posts onto the website. The limitations of such summary statistics must be acknowledged as they cannot capture, for example, levels of critical thinking and collaboration taking place online (Haythornthwaite & Andrews, 2011). Capturing more detailed information on the quality of online student engagement presents many difficulties, taking into consideration, for example, the time consuming nature of any attempts to engage in close reading and analysis of participants' posts over the course of a two year programme. Further research would therefore be needed in order to extract more sophisticated information about the engagement of participants.

Future Research

It is an important finding that RTLB perceive that the training programme enables them to develop competencies important to their work in the field. Leading on from this study, however, future research should seek to determine the extent to which the development of competencies in the training context enables specialist teachers to apply the skills, knowledge, attitudes and practices learned in order to make changes

to their own practice, enhance the practice of classroom teachers and schools, and improve outcomes for the students with special education needs with whom they work.

Results of the two small-scale studies by Thomson (2013) and Walker (2013) discussed in the introduction chapter indicated that some RTLB who had completed the previous training programme were able to effectively use the collaborative problem-solving approach taught during training to enhance the work of teachers that they supported. To continue to develop our understanding of the impact of training on RTLB practice, it would be useful for future research to focus on three interrelated areas. These are: the impact of RTLB competency development on the practice of classroom teachers and schools; the impact of RTLB competency development on the achievement of students with learning and behavior difficulties; and, the impact of RTLB competency development on outcomes for Māori learners. In addition, not only it is important to establish the impact of competency development on RTLB practice immediately following their completion of the training programme, but follow up studies should also be considered in order to examine whether levels of competency and impact on teachers, schools and students are sustained over time.

The Impact of RTLB Competency Development on the Practice of Classroom Teachers and Schools

The important role of RTLB in impacting practice at the school-wide level in Aotearoa New Zealand, has been discussed in the introduction to this study. It was considered that trained RTLB were required to act as agents of change in schools to alter school environments so that the needs of students were met (Moore et al., 1999; Thomson, 2013; Thomson et al., 2000; Walker, 2013). The effectiveness of the RTLB service in carrying out this role has, however, been questioned (Education Review

Office, 2004). It would be useful therefore to collect data from a range of sources about the levels of competency demonstrated by RTLB following their training with regard to the five competency clusters and the impact of these on the practice of classroom teachers and schools. In order to triangulate data, pre and post training questionnaire surveys as well as interview tools can be used to gain the perspectives of RTLB managers as well as classroom teachers, school leaders and RTLB themselves about these factors. Researcher observations of RTLB practice using observation schedules to rate the levels of competency demonstrated by RTLB will also be helpful in data triangulation.

The Impact of RTLB Competency Development on Student Achievement

Whitten and Westling (1985) conclude that the ultimate test of the effectiveness of competencies is the extent to which their deployment impacts the achievement of students. However, these authors acknowledge the difficulty of research aimed at gaining such empirical evidence. In order to gain such evidence it will be useful to collect criterion referenced data as well as standardized data using instruments used in schools, for example Assessment Tools for Teaching and Learning (AsTTle) and the STAR Reading Test, to examine student performance at the start of the RTLB involvement and at the end of that involvement. Ideally, data from students receiving support from RTLB who have not yet undertaken the training can also be collected so as to provide a comparison group. In addition to capturing criterion referenced and standardized data relevant to student achievement, however, it is important that future research also captures the voices of students themselves with regard to their involvement with RTLB who have completed the training programme.

The Impact of RTLB Competency Development on Outcomes for Māori Learners.

For reasons discussed in the introduction to this study, it is particularly important to

go on to examine the links between RTLB acquisition of competencies and the practice of RTLB trained in the PGDipST(L&B) programme in relation to their work with Māori students. Raising the achievement of Māori learners is a key national priority in Aotearoa New Zealand. Māori students account for the largest group of students referred to RTLB, yet it has been reported that many RTLB are unable to demonstrate their effectiveness in meeting the needs of these students (Education Review Office, 2004).

Despite some progress having been made (Bishop et al., 2012), meeting the needs of Māori students remains a task in which all educational stakeholders have a role to play but it is one in which the role of RTLB is key. An important finding of this study was that participants perceived they were well enabled to develop all nine of the competencies specific to cultural responsiveness, with only very small mean differences between the lowest and highest rated competencies in the cultural responsiveness cluster. Leading on from this it is important to examine whether trained RTLB are able to deploy these cultural competencies effectively in schools. This is because research has shown, for example, that despite the success of the Te Kotahitanga project in bringing about change for Māori students in the schools in which it has been implemented, some of these schools continue to experience challenges in sustaining positive outcomes for students.

In collecting data on Māori student achievement, it is particularly important for researchers to go beyond the collection of criterion referenced and standardized data and to capture the voices of students and of their whānau. This would enable researchers to gain an understanding of the extent to which Māori perceive that RTLB involvement reflects their cultural values and aspirations as Māori. Such data may offer particularly useful opportunities to examine the extent to which RTLB are able

to effectively utilize competencies relevant to culturally responsive practice in meeting the national aim of ensuring that Māori students are, "… enjoying and achieving success as Māori" (Ministry of Education, 2013a, p. 5).

Throughout this research journey the three key research questions were instrumental in the examination of the perceptions of students enrolled in a Learning and Behaviour endorsement of a national specialist teaching programme. The programme's prescribed competencies were investigated to ascertain their level of importance, and their capacity to grow the specialist teachers professionally and culturally. Factors perceived to have acted as enablers of or barriers to the development of competencies by specialist teachers were also considered. In responding to the research questions many imperatives were highlighted and real-life examples were offered by real people, in real contexts, with real interests in a real community – one that is intent on providing positive support for learning and behaviour in schools in Aotearoa New Zealand.

REFERENCES

Ainscow, M., Booth, T., & Dyson, A. (2006). *Improving schools, developing inclusion.* London, England: Routledge.

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York, NY: Academic Press.

Baskerville, D. (2009). Navigating the unfamiliar in a quest towards culturally responsive pedagogy in the classroom. *Teaching and Teacher Education, 25*, 461-467.

Benitez, D. T., Morningstar, M. E., & Frey, B. B. (2009). A multistate survey of special education teachers' perceptions of their transition competencies. *Career Development for Exceptional Individuals, 32*(1), 6-16.

Berryman, M., Kerr, L., Macfarlane, A. H., Penetito, W., & Smith, G. H. (2012). *Education for Māori: Context for our proposed audit work until 2017*. A parliamentary paper published by the Office of the Auditor-General and presented to the House of Representative under section 20 of the Public Audit Act 2001.

Bevan-Brown, J., Kearney, A., Mentis, M., Sutherland, D., Ward, A., Bridges, S.,…Dharan, V. (2010). *Post graduate diploma in specialist teaching: Milestone 2 report* (3.1). Retrieved from http://specialistteaching.net.nz/course/view.php?id=11

Bishop, A. R., Berryman, M. A., Wearmouth, J. B., & Peter, M. (2012). Developing an effective education reform model for indigenous and other minoritized students. *School Effectiveness and School Improvement, 23*(1), 47-70.

Bishop, R. (2010). Effective teaching for indigenous and minoritized students. *Procedia Social and Behavioural Science, 7*(C), 57-62.

Bishop, R. (2012). Pretty difficult: Implementing kaupapa Māori theory in English-medium secondary schools. *New Zealand Journal of Educational Studies, 47*(2), 38-50.

Bishop, R., & Berryman, M. (2009). The Te Kotahitanga effective teaching profile. *SET 2*. 27-33.

Bishop, R., Berryman, M., Cavanagh, T., & Teddy, L. (2009). Te Kotahitanga: Addressing educational disparities facing Māori students in New Zealand. *Teaching and Teacher Education, 25*, 734-742.

Bishop, R., & Glynn, T. (1999). *Culture Counts: Changing power relationships in education*. Palmerston North, New Zealand: Dunmore Press.

Bishop, R., Ladwig, J., & Berryman, M. (2014). The centrality of relationships for pedagogy: The whanaungatanga thesis. *American Educational Research Journal, 51*(1), 184-214.

Bloor, M., Frankland, J., Thomas, M., & Robson, K. (2001). *Focus groups in social research*. London, England: SAGE.

Bricker, D., Brown, L., Clifton, A., Crowner, T., Edgar, E., Haring, N., … York, R. (1977). Behavioral technology and systematic instruction. In R. Perske & J. Smith (Eds.), *Beyond the ordinary the preparation of professionals to educate severely and profoundly handicapped persons: towards the development of standards and criteria* (pp. 9-12). St. Paul, MN: Minnesota State Planning Agency.

Brockett, R. G., & Hiemstra, R. (1991). *Self-direction in adult learning: Perspectives on theory, research and practice.* New York, NY: Routledge.

Brown, D., Thomson, C., Anderson, A., Moore, D., Glynn, T., Macfarlane, A., … Yssedlyke, J. (2000). Resource teachers learning and behaviour: An ecological approach to special education. *Australasian Journal of Special Education*,

24(1), 5-20.

Brown, S. (1997). Special Education 2000: Developing a policy for inclusive education in New Zealand. *New Zealand Annual Review of Education, 6,* 141-156.

Brown, J. S., & Duguid, P. (1991). Organizational learning and communities of practice: Toward a unified view of working, learning and innovation. *Organization Science, 2*(1), 40-57.

Carnoy, M. (1999). *Globalization and educational reform: What planners need to know*. Paris, France: United Nations Educational, Scientific and Cultural Organization.

Cheung, W. S., & Hew, K. F. (2011). Design and evaluation of two blended learning approaches: Lessons learned. *Australasian Journal of Educational Technology, 27* (8), 1319-1337.

Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education* (7th ed.). Abingdon, UK: Routledge.

Conderman, G., Johnston-Rodriguez, S., Hartman, P., & Walker, D. (2013). Honoring voices from beginning special educators for making changes in teacher preparation. *Teacher Education and Special Education, 36*(1)*,* 65-76.

Council for Exceptional Children. (1996). *What every special educator must know: The international standards for the preparation and certification of special education teachers.* Reston, VA: The Council for Exceptional Children.

Council for Exceptional Children. (2008). *What every special educator must know: Ethics, standards, and guidelines* (6th ed.). Arlington, VA: Council for Exceptional Children.

Cox, A. (2005). What are communities of practice? A comparative review of four

seminal works. *Journal of Information Science, 31*(6), 527-540.

Creech, W. (1997). *Special Education 2000*. Retrieved from http://www.beehive.govt.nz/feature/special-education-2000.

Creswell, J., & Plano Clark, V. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: SAGE.

Dardig, J. C., & Moyer, J. R. (1979). Modulate then mediate: Training special educators. *Journal of Teacher Education, 30*(6), 17-19.

Darling-Hammond, L. (2006). Constructing 21st century teacher education. *Journal of Teacher Education, 57*(10), 1-15.

DeFur, S. H., & Taymans, J. M. (1995). Competencies needed for transition specialists in vocational rehabilitation, vocational education, and special education. *Exceptional Children, 62*(1), 38-51.

Dingle, M., Falvey, M., Givner, C., & Haager, D. (2004). Essential special and general education teacher competencies for preparing teachers for inclusive settings. *Issues in Teacher Education*, *13*(1), 35-50.

Dixon, M. D. (2010). Creating effective student engagement in online courses: What do students find engaging? *Journal of the Scholarship of Teaching and Learning, 10*(2), 1-13.

Dumont, H., & Istance, D. (2010). Analysing and designing learning environments for the 21st century. In H. Dumont, D. Istance, & F. Benavides (Eds.) *The nature of learning: Using research to inspire practice* (pp. 19-34). Paris, France: OECD.

Durie, M. (1998). *Te mana, te kawanatanga: The politics of Maori self-determination.* Auckland, New Zealand: Oxford University Press.

Durie, M. (2005, November). *Indigenous higher education: Māori experience in New Zealand.* An address to the Australian Indigenous Higher Education Advisory Council, Canberra, Australia.

Education Review Office. (2004). *Evaluation of the resource teacher: learning and behavior service.* Wellington, New Zealand: Education Review Office.

Education Review Office. (2012). *Evaluation at a glance: Priority learners in New Zealand schools.* Wellington, New Zealand: Education Review Office.

Education Review Office. (2013). *Including students with high needs: Primary schools.* Wellington, New Zealand: Education Review Office.

Education Review Office. (2015). *Inclusive practices for students with special needs in schools.* Wellington, New Zealand: Education Review Office.

Ergul, C., Baydik, B., & Demir, S. (2013). Opinions of in-service and pre-service special education teachers on the competencies of the undergraduate special education programs. *Educational Science: Theory & Practice, 13*(1), 518-522.

Erickson, A. S., Noonan, P. M., & McCall, Z. (2012). Effectiveness of online professional development for rural special educators. *Rural Special Education Quarterly, 31*(1), 22-32.

Fishman, B., Konstantopoulos, S., Kubitskey, B.W., Vath, R., Park, G., Johnson, H., & Edelson, D. C. (2013). Comparing the impact of online and face-to-face professional development in the context of curriculum implementation. *Journal of Teacher Education, 64*(5). 426-438.

Florida Department of Education. (2009). *Competencies and skills required for teacher certification in Florida.* Tallahassee, Fl: Author.

Gangani, N., McLean, G. N., & Braden, R. A. (2006). A competency-based human resource development strategy. *Performance Improvement Quarterly, 19*(1),

127-140.

Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly, 48*(1), 18-33.

Garrison, D. R. (2011*). E-learning in the twenty-first century: A framework for research and practice* (2nd ed.). New York, NY: Routledge.

Garrison, R., & Vaughan, N. D. (2008). *Blended learning in higher education: Framework, principles, and guidelines.* San Francisco, CA: Jossey-Bass.

Glynn, T. & Macfarlane, A. (2002, November). *Māori and bicultural positions: Professional development programme for Resource Teachers Learning and Behaviour.* Paper presented at the National Māori Graduate Psychology Symposium, Hamilton, New Zealand.

Greaves, A. (2003). Special education 2000: Rhetoric or reform? *Auckland College of Education Papers, 12,* 58-74.

Gruenbaum, E. A. (2010). Predictors of success for adult online learners: A review of the literature. *E-Learn Magazine*. Retrieved from http://elearnmag.acm.org/featured.cfm?aid=1722023

Halcomb, E. J., & Davidson, P. M. (2006). Is verbatim transcription of interview data always necessary? *Applied Nursing Research, 19*, 38-42.

Hara, N. (2009). *Communities of practice: fostering peer-to-peer learning and informal knowledge sharing in the work place.* New York, NY: Springer.

Hattie, J. (2009). *Visible Learning: A synthesis of over 800 meta-analyses relating to achievement.* London, England: Routledge.

Haythornthwaite, C., & Andrews, R. (2011). *E-Learning theory & Practice*. London, England: SAGE.

Hedges, A. (1985). Group interviewing. In R. Walker (Ed.). *Applied qualitative research* (pp. 71-91). Aldershot, England: Gower.

Heller, K. W., Dykes, M. K., Best, S., & Cohen, E. T. (1999). A national perspective of competencies for teachers of individuals with physical and health disabilities. *Exceptional Children, 65*(2), 219-234.

Herr, D. E., Algozzine, R. F., & Heuchert, C. M. (1976). Competencies of teachers of the mildly handicapped. *The Journal of Special Education, 10*(1), 97-106.

Hornby, G., Wickham, P., & Zielinski, A. (1991). Establishing competencies for training teachers of children with special educational needs. *European Journal of Special Needs Education, 5*(1), 30-36.

Hyatt, J. (1986). Analysis of qualitative data. In J. Ritchie & W. Sykes (Eds.), *Advanced workshop in applied qualitative research* (pp. 32-39). London, England: Social and Community Planning Research.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*(7), 14-26.

Jones, L., & Moore, R. (1995). Appropriating competence. *British Journal of Education and Work, 8*(2), 78-92.

Jones, S. (1985). The analysis of depth interviews. In R. Walker (Ed.), *Applied qualitative research* (pp. 56-70). Aldershot, England: Gower.

Kearney, A., & Hornby, G. (2012). Coordinator Reports. In A. Kearney, J. Bevan-Brown, M. Mentis, J. Budd, T. Riley, J. Annan… J. Lelijveld (eds). *Post graduate diploma in specialist teaching: Milestone 5 report* (appendix 5). Retrieved from http://specialistteaching.net.nz/course/view.php?id=11

Kerka, S. (1998). *Competency-based education and training: myths and realities*.

Retrieved from http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED415430&ERICExtSearch_SearchType_0=no&accno=ED415430

Kleinhenz, E., & Ingvarson, L. (2007). *Standards for teaching: Theoretical underpinnings and applications.* Wellington, New Zealand: New Zealand Teachers Council.

Knowles, M. S. (1975). *Self-directed learning: A guide for learners, and teachers.* New York, NY: Association Press.

Knowles, M. S. (1984). *Andragogy in action: Applying principles of adult learning.* San Francisco, CA: Jossey-Bass.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2015). *The adult learner: the definitive classic in adult education and human resource development* (8th ed.). London, England: Routledge.

Kocoglu, Z., Ozek, Y., & Kesli, Y. (2011). Blended learning: Investigating its potential in an English language teacher-training program. *Australasian Journal of Educational Technology, 27*(7), 1124-1134.

Krueger, R. A., & Casey, M.A. (2009). *Focus groups: A practical guide for applied research* (4th ed.). Thousand Oaks, CA: SAGE.

Lambe, J., McNair, V., & Smith, R. (2013). Special educational needs, e-learning and the reflective e-portfolio: implications for developing and assessing competence in pre-service education. *Journal of Education for Teaching, 39*(2), 181-196.

Lave, J., & Wenger, E. (1991). *Situated Learning. Legitimate peripheral participation.* Cambridge, England: University of Cambridge Press.

Linderman, E. C. (1926). *The meaning of adult education.* New York, NY: New Republic.

Liu, W., Carr, R. L., & Strobel, J. (2009). Extending teacher professional development through an online community: A case study. *Journal of Educational Technology Development and Exchange, 2*(1), 99-112.

Lock, K. J., & Gibson. J. K. (2008). Explaining Māori under-achievement in standardized reading tests: the role of social and individual characteristics. *Kōtuitui: New Zealand Journal of Social Sciences Online, 3*, 1-13.

Lombardi, T., & Hunka, N. (2001). Preparing general education teachers for inclusive classrooms: Assessing the process. *Teacher Education and Special Education, 24*(3), 183-197.

Lord, G., & Lomicka, L. (2008). Blended learning in teacher education: An investigation of classroom community across media. *Contemporary Issues in Technology and Teacher Education, 8(2),* 158-174.

Macfarlane, A. H. (2004). *Kia hiwa ra! Listen to culture – Maori students' plea to educators.* New Zealand Council for Educational Research: Wellington, New Zealand.

Macfarlane, A., Glynn, T., Cavanagh, T., & Bateman, S. (2007). Creating culturally-safe schools for Maori students. *Australian Journal of Indigenous Education. 36,* 65-75.

Macfarlane, A., Glynn, T., Grace, Penetito, W., & Bateman, S. (2008). Indigenous epistemology in a national curriculum framework? *Ethnicities, 8*(1), 102-127.

Macfarlane, S. & Macfarlane, A. (2013). Culturally responsive evidence-based special education practice: Whaia kit e ara tika. *Waikato Journal of Education, 18*(2), 66-78.

Malinen, O., Vaisanen, P., & Savloainen. H. (2012). Teacher education in Finland: a review of a national effort for preparing teachers for the future. *The Curriculum Journal, 23*(4), 567-584.

Mansfield, B. (1989). Competence and standards. In J. W. Burke (Ed.), *Competency based education and training* (pp. 26-38). London, England: Taylor & Francis.

Meredith, K. (2012). Post Graduate Diploma in Specialist Teaching: Executive Summary. In A. Kearney, J. Bevan-Brown, M. Mentis, J. Budd, T. Riley, J. Annan… J. Lelijveld (eds). *Post graduate diploma in specialist teaching: Milestone 5 report* (appendix 7). Retrieved from http://specialistteaching.net.nz/course/view.php?id=11

Merriam, S. B., & Bierema, L. L. (2014). *Adult learning: Linking theory and practice*. San Francisco, CA: Jossey-Bass.

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: SAGE.

Ministry of Education (1996). *Special Education 2000.* Wellington, New Zealand: Ministry of Education.

Ministry of Education (2007a). *The New Zealand Curriculum.* Wellington, New Zealand: Ministry of Education.

Ministry of Education (2007b). *Resource Teacher Learning and Behaviour (RTLB) policy and toolkit.* Wellington, New Zealand: Ministry of Education.

Ministry of Education (2008a). *Ka Hikitia – managing for success: The Māori education strategy 2008-2012.* Wellington, New Zealand: Ministry of Education.

Ministry of Education (2008b). *Resource Teacher: Learning and Behaviour Annual Report 2006*. Wellington, New Zealand: Ministry of Education.

Ministry of Education (2009). *Ngā Haeata Mātauranga - Annual report on Maori education 2008/09*. Wellington, New Zealand: Ministry of Education.

Ministry of Education. (2011a). *Tātaiako: Cultural competencies for teachers of Māori learners.* Wellington, New Zealand: Ministry of Education.

Ministry of Education. (2011b). *Resource Teacher Learning and Behaviour service toolkit.* Wellington, New Zealand: Ministry of Education.

Ministry of Education. (2011c). Transformation of resource teachers: Learning and behaviour service. *Tukutuku Kōrero, 90*(4), 11.

Ministry of Education (2012). *Amalgamating the supplementary learning support (SLS) and resource teacher: Learning and behavior (RTLB) services – a discussion document.* Wellington, New Zealand: Ministry of Education.

Ministry of Education. (2014). *Ministry of education statement of intent 2014-2018*. Wellington, New Zealand: Ministry of Education.

Ministry of Education. (2015). *Education for all 2015 national review*. Wellington, New Zealand: Ministry of Education.

Ministry of Education Website. (2012). *Success for All*. Retrieved from http://www.minedu.govt.nz/NZEducation/EducationPolicies/SpecialEducation/OurWorkProgramme/SuccessForAll.aspx

Ministry of Education. (2013a). *Ka Hikitia: Accelerating success 2013-2017*. Wellington, New Zealand: Ministry of Education.

Ministry of Education. (2013b). *Pasifika Education Plan 2013-2017.* Wellington, New Zealand: Ministry of Education.

Mitchell, D. (2010). *Education that fits: Review of international trends in the education of students with special educational needs*. Wellington, New Zealand: Ministry of Education.

Moore, D., Anderson, A., Timperley, H., Glynn, T., Macfarlane, A., Brown, D., & Thomson, C. (1999). *Caught Between Stories: Special Education in New Zealand.* Wellington, New Zealand: New Zealand Council for Educational Research.

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). E-learning, online learning, and distance learning environments: Are they the same? *Internet and Higher Education, 14,* 129–135.

Morgan, D. L. (1996). Focus groups. *Annual Review of Sociology, 22*, 129-152.

Morgan, D. L. (1997). *Focus groups as qualitative research* (2nd ed.). Thousand Oaks, CA: SAGE.

Murray, J. (2009) Teacher competencies in the post-method landscape: The limits of competency-based training in TESOL teacher education. *Prospects, 24*(1), 17-29.

New Zealand Teachers Council (2004). *Code of ethics for registered teachers*. Retrieved from http://www.teacherscouncil.govt.nz/required/ethics/index.stm

New Zealand Teachers Council. (2007). *Graduating teacher standards*. Retrieved from http://www.teacherscouncil.govt.nz/te/gts/index.stm

New Zealand Teachers Council. (2010). *Registered teacher criteria handbook*. Retrieved from http://www.teacherscouncil.govt.nz/rtc/index.stm

Newby, P. (2010). *Research methods for education.* Harlow, England: Pearson.

Newcomer, P. L. (1978). Competencies for professionals in learning disabilities. *Learning Disability Quarterly, 1*(2), 69-77.

Norman, G. (2010). Likert scales, levels of measurement and the ‘‘laws’’ of statistics. *Advances in Health Science Education, 15,* 625-632.

OECD. (2012). *Education at a glance 2012: OECD indicators.* Paris, France: OECD.

OECD. (2014). *Education at a glance 2014: OECD indicators*. Paris, France: OECD.

O’Neill, J. (2008). Putting teacher learning in context. In R. Bourke, A. Lawrence, A. McGee, J. O’Neill, & J. Curzon (Eds.), *Talk about learning: Working alongside teachers* (pp. 27-38). Auckland, New Zealand: Pearson Education.

Pallant, J. (2001). *SPSS Survival Manual.* Buckingham, UK: Open University Press.

Pihama, L., Smith, K., Taki, M., & Lee, J. (2004). *A literature review on Kaupapa Maori and Maori education pedagogy*. The International Research Institute for Maori and Indigenous Education: Auckland, New Zealand.

Pitman, J.A., Bell, E. J., & Fyfe, I. K. (November 1999). *Assumptions and origins of competency-based assessment: New challenges for teachers*. Paper presented at the Australian Association for Research in Education and the New Zealand Association for Research in Education Conference, Melbourne, Australia.

Professional and Teacher Development Task Force. (2004). *Competencies for educators working with children with diverse learning needs.* Columbus, OH: Ohio Developmental Disabilities Council.

Punch, K., (2009). *Introduction to research methods in education.* London, England: SAGE.

Rakap, S., Jones, H. A., & Emery, A. K. (2014). Evaluation of a web-based professional development programme (project ACE) for teachers of children

with autism spectrum disorders. *Teacher Education and Special Education,* DOI:10.1177/0888406414535821

Rasch, D., & Guiard, V. (2004). The robustness of parametric statistical methods. *Psychology Science, 46*(2), 175-208.

Rogers, A. (1996). *Teaching Adults* (2nd ed.). Buckingham, UK: Open University Press.

RTLB Association. (2011). *RTLB indicators for registered teacher criteria.* Wellington, New Zealand: Ministry of Education.

Ryba, K., Selby, L., & Kruger, L. J. (2002). Creating computer-mediated communities of practice in special education. *Special Services in the Schools*, *17*(1-2), 59-76.

Savage, C., Hindle, R., Meyer, L. H., Hynds, A., Penetito, W., & Sleeter, C. E. (2011). Culturally responsive pedagogies in the classroom: Indigenous student experiences across the curriculum. *Asia-Pacific Journal of Teacher Education, 39*(3), 183-198.

Savolainen, H., Engelbrecht, P., Nel, M., & Malinen, O. (2012). Understanding teachers' attitudes and self-efficacy in inclusive education: Implications for pre-service and in-service teacher education. *European Journal of Special Needs Education, 27*(1), 51-68.

Smith, D. D., & Tyler, N. C. (2011). Effective inclusive education: equipping education professionals with necessary skills and knowledge. *Prospects, 41,*

323-339.

Smith, G. D., & Morris, P. E. (2015). Building confidence in confidence intervals. *The Psychologist, 28*(6), 476-479.

Smith, K., & Lev-Ari, L. (2005). The place of the practicum in pre-service teacher education: the voice of students. *Asia-Pacific Journal of Teacher Education, 33*(3), 289-302.

Stewart, D. W., Shamdasani, P. N., & Rook, D. V. (2007). *Focus groups: Theory and practice* (2nd ed.). Thousand Oaks, CA: SAGE.

Struyven, K. & De Meyst, M. (2010). Competence-based teacher education: Illusion or reality? An assessment of the implementation status of Flanders from teachers' and students' points of view. *Teaching and Teacher Education, 26,* 1495-1510.

Sullivan, R. S. (1995). *The competency-based approach to training. (Strategy Paper No. 1)*. Baltimore, MD: Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO).

Swan, W. W., & Sirvis, B. (1992). The CEC common core of knowledge and skills essential for all beginning special education teachers. *Teaching Exceptional Children, 25*(1), 16-20.

Tappenden, S. (2011). Blended and mobile learning: Experiences from a New Zealand faculty of law. In A. Kitchenham (Ed.), *Blended learning across disciplines: Models for implementation* (pp. 99-111). Hershey, PA: IGI Global.

Thompson, J. R., Klass, P. H., & Fulk, B. M. (2012). Comparing online and face-to-face presentation of course content in an introductory special education course. *Teacher Education and Special Education, 35*(3), 228-242.

Thomson, C. (2004). How to make "what works" work: A role for the resource teacher learning and behavior. *New Zealand Annual Review of Education, 13,* 249-269.

Thomson, C. (2013). Collaborative consultation to promote inclusion: voices from the classroom. *International Journal of Inclusive Education, 17*(8), 882-894.

Thomson, C., Brown, D., Jones, E., & Manins, E. (2000). The Development of Resource Teachers in New Zealand: A quarter century of paradigm change. In I. Livingstone (ed.), *New Zealand Annual Review of Education* (pp. 23-42). Wellington, New Zealand: Victoria University of Wellington:

Thomson, C., Brown, D., Jones, L., Walker, J., Moore, D., Anderson, A., … Glynn, T. (2003). Resource teachers learning and behavior: Collaborative problem solving to support inclusion. *Journal of Positive Behavior Interventions, 5*(2), 101-111.

Tomei, L. A. (2010). *Designing instruction for the traditional, adult, and distance learner: a new engine for technology-based teaching.* Hershey, PA: Information Science Reference.

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, *68*(2), 202-248.

Tuxworth, E. (1989). Competence based education and training: Background and origins. In J. W. Burke (Ed.), *Competency based education and training*. (pp. 10-25). Lewes, England: Falmer Press.

United Nations. (2006). *Convention on the rights of persons with disabilities and optional protocol*. Paris: UNESCO. Retrieved from http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf

UNESCO. (1994). *The Salamanca statement and framework for action on special needs education.* Paris: UNESCO.

UNESCO. (2009). *Policy guidelines on inclusion in education*. Paris, France: UNESCO. Retrieved from http://unesdoc.unesco.org/images/0017/001778/177849e.pdf

Urton, K., Wilbert, J., & Hennemann, T. (2014). Towards inclusion and self-efficacy of principals and teachers. *Learning Disabilities: A Contemporary Journal, 12*(2), 151-168.

U.S. Department of Education, Office of Planning, Evaluation, and Policy Development. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies.* Washington, DC: Author.

U.S. Department of Labour. (1991). *What work requires of schools: A SCANS report for America 2000*. Retrieved from http://www.gsn.org/web/_shared/SCANS2000.pdf

Vernon-Dotson, L. J., Floyd, L. O., Dukes. C., & Darling, S. M. (2014). Course delivery: Keystones of effective special education teacher preparation. *Teacher Education and Special Education, 37*(1), 34-50.

Villegas, A. M., & Lucas, T. (2002a). *Educating culturally responsive teachers: A coherent approach.* Albany, NY: State University of New York Press.

Villegas, A. M. & Lucas, T. (2002b). Preparing culturally responsive teachers: Rethinking the curriculum. *Journal of Teacher Education, 53*(1), 20-32.

Vause, G. (2011). *Special Education – RTLB – transforming an essential service*. Retrieved from http://www.edgazette.govt.nz/Articles/Article.aspx?ArticleId=8264&Title=Special%20Education%20%E2%80%93%20RTLB%20%E2%80%93%20Transforming%20an%20essential%20service

Walker, J. J. (2013). *Supporting inclusive teaching practices: An investigation into consultant special educator use of the collaborative problem-solving model* (Unpublished doctoral dissertation). University of Auckland, Auckland, New Zealand.

Wenger, E. (2000). Communities of practice and social learning systems. *Organization, 7*(2), 225-246.

Whitten, T., & Westling, D. (1985). Competencies for teachers of the severely and profoundly handicapped: A review. *Teacher Education and Special Education, 8(2), 104-111.*

Wong L., Tatnall, A, & Burgess, S. (2014). A framework for investigating blended learning effectiveness. *Education and Training, 56* (2/3), 233-251.

Yuen, A. H. K. (2011). Exploring teaching approaches in blended learning. *Research and Practice in Technology Enhanced Learning, 6*(1), 3-23.

Zambone, A., & Alsop, L. (2009). Ensuring access to highly qualified interveners and teachers: establishing intervener and teacher specialized professional associations. *Council for Exceptional Children D.V.I. Quarterly, 54*(3), 27-35.

Appendix A: Competencies in the Four Courses of the Programme

Theory and Foundations of Learning and Behaviour Diversity (L&B course)

1. Demonstrate an understanding of the nature and extent of learning and behaviour difficulties and interventions to meet the needs of students who experience difficulties with learning and behaviour.
2. Demonstrate an understanding of Kaupapa Māori - Thinking and theorising.
3. Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate individual assessments and interventions for students who experience difficulties with learning and behaviour.
4. Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate small group assessments and interventions for addressing learning and behaviour difficulties.
5. Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate whole class assessments and interventions for addressing learning and behaviour difficulties.
6. Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate school wide systems and interventions for addressing learning and behaviour difficulties.
7. Demonstrate understanding of inter-personal competencies needed for working effectively with parents, whānau, teachers, other school staff and professionals not based in schools.
8. Demonstrate an understanding of the concept of teacher learning and the knowledge and skills for assisting teachers and principals to create positive learning environments.
9. Demonstrate an understanding of the RTLB role and its links to other learning and behaviour initiatives.
10. Demonstrate knowledge and skills in developing, delivering, and evaluating RTLB operational processes.

Core Theory and Foundations of Specialist Teaching (Core course)

1. Demonstrate knowledge and skills in becoming an ethical and reflective practitioner.
2. Demonstrate knowledge and skills in using the code of ethical practice for various Specialist Teaching areas (eg. Teachers Council Ethical Guidelines).

3. Critically discuss legislation, policy and curriculum documents across Specialist Teaching areas.
4. Demonstrate an understanding of the concept and role of culture.
5. Reflect on own cultural values, practices and beliefs.
6. Critique the influence of the majority culture on the Aotearoa New Zealand education system.
7. Demonstrate an understanding of the concepts of biculturalism and multiculturalism.
8. Critically review historical and current perspectives on special and inclusive education, disability and diversity.
9. Demonstrate knowledge of human development and learning theories.
10. Consult and collaborate on inter-professional implications of theories of learning and development.
11. Demonstrate knowledge of collaborative and consultative models of working and strengthening partnerships.
12. Share professional knowledge and skills to learn with, from and about specialist areas.
13. Reflect on and contribute to communities of learning and practice.
14. Demonstrate knowledge of evidence based and effective teaching and learning practices.
15. Critically evaluate resources and intervention strategies.
16. Critically discuss and evaluate curriculum and programme adaptations and solution/strength-based interventions.
17. Demonstrate knowledge of assessment models and practices.
18. Critically evaluate assessment approaches and tools.
19. Discuss and compare assessments practices across specialist areas.
20. Consult, collaborate and reflect on IEP or equivalent across specialist areas

Evidence Based Inter-professional Practice (EBIP course)

1. Demonstrate knowledge and understanding of principles and practices of learning with from and about other specialist areas.
2. Critically discuss the values, skills and attitudes needed for inter-professional practice.
3. Collaborate on an inter-professional case study.
4. Critically discuss and apply Māori and multicultural concepts and practices across Specialist Teaching areas.
5. Critically reflect on issues relating to forming partnerships with professionals and stakeholders.
6. Understand and apply evidence-based frameworks relating to inclusion.
7. Demonstrate a commitment to sustainable practice

8. Identify and critically analyse evidence-based practices in the area of learning and behaviour including special and inclusive education.

Practicum Paper for the Learning and Behaviour (Practicum course)

1. Demonstrate a commitment to promoting the well-being of all ākonga.
2. Show leadership that contributes to effective teaching and learning.
3. Conceptualise plan and implement an appropriate learning programme.
4. Promote a collaborative inclusive and supportive learning environment.
5. Demonstrate a commitment to bicultural partnership in Aotearoa New Zealand.
6. Respond effectively to the diverse language and cultural experiences, and the varied strengths, interests and needs of individuals and groups of ākonga.
7. Work effectively with the bicultural context of Aotearoa New Zealand.
8. Demonstrate in practice, knowledge and understanding of how ākonga learn.
9. Demonstrate a commitment to ongoing professional learning and development of personal professional practice.
10. Establish and maintain effective professional relationships focused on the learning and well being of ākonga.
11. Gather, analyse and appropriately use, assessment information which has been gathered formally and informally.
12. Use critical inquiry and problem solving effectively in professional practice.
13. Maintain effective record keeping systems.

Appendix B

Participant Questionnaire Survey

Competencies in Specialist Teacher Training

About you

1. What is your name?

2. What is your gender?
- Female
- Male

3. Which category below includes your age?
- 21-29
- 30-39
- 40-49
- 50-59
- 60 or older

4. What is your ethnicity (please tick as many as apply)?
- Pakeha/New Zealander of European origin
- Maori
- Pacific Nation (please specify below)
- Asian (please specify below)
- Other European (please specify below)
- Other (please specify below)

Please specify ethnicity here:

5. How many years of teaching experience within a mainstream setting do you have?
- none
- 4 years or less
- 5-9 years
- 10-14 years
- 15-19 years
- 20-24 years
- 25 years or more

6. How many years of experience do you have with teaching pupils with learning and behavioural needs?

- ○ none
- ○ 4 years or less
- ○ 5-9 years
- ○ 10-14 years
- ○ 15-19 years
- ○ 20-24 years
- ○ 25 years or more

7. How many years of other relevant professional experience do you have (e.g. educational psychologist)?

- ○ none
- ○ 4 years or less
- ○ 5-9 years
- ○ 10-14 years
- ○ 15-19 years
- ○ 20-24 years
- ○ 25 years or more

Please briefly describe type of experience

8. To which educational sector does your current professional work relate (you can check as many boxes as appropriate)?

- ☐ primary
- ☐ secondary
- ☐ Special School/Unit

9. What is your highest qualification?

- ○ No formal qualification
- ○ Diploma
- ○ Bachelor degree
- ○ Degree with Honours
- ○ Postgraduate diploma
- ○ Masters degree
- ○ Doctorate

Please name the qualification and majoring subject

10. How many years of experience do you have working as an RTLB?

- none
- 4 years or less
- 5-9 years
- 10-14 years
- 15-19 years
- 20-24 years
- 25 years or more

Competencies in Theory and Foundations of Learning and Behaviour Diversity

The following competencies are taken from the Specialist Teaching Programme documentation. In relation to each course competency, please rate your response to these two questions on a scale of 1 - 5, where 1= minimally and 5= substantially:
(a) To what extent did the course enable you to develop this competency?
(b) To what extent is this competency important to your professional work?

11. Demonstrate an understanding of the nature and extent of learning and behaviour difficulties and interventions to meet the needs of students who experience difficulties with learning and behaviour.

	minimally				**substantially**	**Don't know**
Course Enabled Development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

12. Demonstrate an understanding of Kaupapa Maori - Thinking and theorising.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency

Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

13. Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate individual assessments and interventions for addressing learning and behaviour difficulties.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

14. Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate small group assessments and interventions for addressing learning and behaviour difficulties.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

15. Demonstrating knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate whole class assessments and interventions for addressing learning and behaviour difficulities.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

16. Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate school wide systems and interventions for addressing learning and behaviour difficulties.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

17. Demonstrate understanding of inter-personal competencies needed for working effectively with parents, whanau, teachers, other school staff and professionals not based in schools.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

18. Demonstrate an understanding of the concept of teacher learning and the knowledge and skills for assisting teachers and principals to create positive learning environments.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

19. Demonstrate an understanding of the RTLB role and its links to other learning and behaviour initiatives.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

20. Demonstrate knowledge and skills in developing, delivering and evaluating RTLB operational processes.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

21. Are there any comments that you wish to make relevant to competencies in Theory and Foundations of Learning and Behaviour Diversity? If yes, please do so in the space below.

Competencies in Core Theory and Foundations of Specialist Teaching

The following competencies are taken from the Specialist Teaching Programme documentation. In relation to each course competency, please rate your response to these two questions on a scale of 1 - 5, where 1= minimally and 5= substantially:
(a) To what extent did the course enable you to develop this competency?
(b) To what extent is this competency important to your professional work?

22. Demonstrate knowledge and skills in becoming an ethical and reflective practitioner.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency

Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

23. Demonstrate knowledge and skills in using the code of ethical practice for various Specialist Teaching areas (eg Teachers Council Ethical Guidelines).

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

24. Critically discuss legislation, policy and curriculum documents across Specialist Teaching areas.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

25. Demonstrate an understanding of the concept and role of culture.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

26. Reflect on own cultural values, practices and beliefs.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

27. Critique the influence of the majority culture on New Zealand education system.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

28. Demonstrate an understanding of the concepts of biculturalism and multiculturalism.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

29. Critically review historical and current perspectives on special and inclusive education, disability and diversity.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency

Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

30. Demonstrate knowledge of human development and learning theories.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

31. Consult and collaborate on inter-professional implications of theories of learning and development.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

32. Demonstrate knowledge of collaborative and consultative models of working and strengthening partnerships.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

33. Share professional knowledge and skills to learn with, from and about specialist areas.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

34. Reflect on and contribute to communities of learning and practice.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

35. Demonstrate knowledge of evidence based and effective teaching and learning practices.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

36. Critically evaluate resources and intervention strategies.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

37. Critically discuss and evaluate curriculum and programme adaptations and solutions/ strength-based interventions.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

38. Demonstrate knowledge of assessment models and practices.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

39. Critically evaluate assessment approaches and tools.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

40. Discuss and compare assessment practices across Specialist areas.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency

Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

41. Consult, collaborate and reflect on IEP or equivalent across Specialist areas.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

42. Are there any comments that you wish to make relevant to competencies in Core Theory and Foundations of Specialist teaching? If yes, please do so in the space below.

Competencies in Evidence Based Inter-professional Practice.

The following competencies are taken from the Specialist Teaching Programme documentation. In relation to each course competency, please rate your response to these two questions on a scale of 1 - 5, where 1= minimally and 5= substantially:
(a) To what extent did the course enable you to develop this competency?
(b) To what extent is this competency important to your professional work?

43. Demonstrate knowledge and understanding of principles and practices of learning with, from and about other specialist areas.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competen	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

44. Critically discuss the values, skills and attitudes needed for inter-professional practice.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

45. Collaborate on an inter-professional case study.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

46. Critically discuss and apply Maori and multicultural concepts and practices across Specialist Teaching areas.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

47. Critically reflect on issues relating to forming partnerships with professionals and stakeholders.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

48. Understand and apply evidence-based frameworks relating to inclusion.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

49. Demonstrate a commitment to sustainable practice.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

50. Identify and critically analyse evidence-based practices in the areas of learning and behaviour including special and inclusive education.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

51. Are there any comments that you wish to make relevant to competencies in Evidence Based Inter-professional Practice? If yes, please do so in the space below.

Competencies in the Practicum for Learning and Behaviour

The following competencies are taken from the Specialist Teaching Programme documentation. In relation to each course competency, please rate your response to these two questions on a scale of 1 - 5, where 1= minimally and 5= substantially:
(a) To what extent did the course enable you to develop this competency?
(b) To what extent is this competency important to your professional work?

52. Demonstrate a commitment to promoting the well-being of all akonga.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

53. Show leadership that contributes to effective teaching and learning.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

54. Conceptualise, plan and implement an appropriate learning programme.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

55. Promote a collaborative, inclusive and supportive learning environment.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

56. Demonstrate a commitment to bicultural partnership in Aotearoa New Zealand.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

57. Respond effectively to the diverse language and cultural experiences and the varied strengths, interests and needs of individuals and groups of akonga.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

58. Work effectively within the bicultural context of Aotearoa New Zealand.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of

						competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

59. Demonstrate in practice, knowledge and understanding of how akonga learn.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

60. Demonstrate a commitment to ongoing professional learning and development of professional practice.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

61. Establish and maintain effective professional relationships focused on the learning and well being of akonga.

	minimally				**substantially**	**Don't know**
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

62. Gather, analyse and appropriately use, assessment information which has been gathered formally and informally.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

63. Use critical inquiry and problem solving effectively in professional practice.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

64. Maintain effective record keeping systems.

	minimally				substantially	Don't know
Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency	Course enabled development of competency
Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work	Importance of competency to my work

65. Are there any comments that you wish to make relevant to competencies in the Practicum for Learning and Behaviour? If yes, please do so in the space below.

Your views

In relation to the four courses that you have completed in the Specialist Teaching programme, please consider the following:

66. What do you consider were the aspects of the programme that most helped you to develop course competencies?

67. Were there any barriers to developing competencies? If yes, please outline these below.

68. Any additional comments.

THANK YOU SO MUCH FOR TAKING THE TIME TO RESPOND TO THIS SURVEY.
If you have any questions at all about this research please do not hesitate to contact Marcia Pilgrim.
Email: marcia.pilgrim@canterbury.ac.nz

Appendix C
Ethics Committee Approval

HUMAN ETHICS COMMITTEE Secretary, Lynda Griffioen

Email: human-ethics@canterbury.ac.nz Ref: 2012/44/ERHEC

12 November 2012

Marcia Pilgrim Health Sciences Centre UNIVERSITY OF CANTERBURY

Dear Marcia

Thank you for providing the revised documents in support of your application to the Educational Research Human Ethics Committee. I am very pleased to inform you that your research proposal "Competencies in specialist teacher training: what enables teachers to develop relevant competencies?" has been granted ethical approval.

Please note that this approval is subject to the incorporation of the amendments you have provided in your emails of 5 and 8 November 2012.

Should circumstances relevant to this current application change you are required to reapply for ethical approval.

If you have any questions regarding this approval, please let me know. We wish you well for your research.

Yours sincerely

Nicola Surtees

ChairEducational Research Human Ethics Committee

Please note that Ethical Approval and/or Clearance relates only to the ethical elements of the relationship between the researcher, research participants and other stakeholders. The granting of approval or clearance by the Ethical Clearance Committee should not be interpreted as comment on the methodology, legality, value or any other matters relating to this research."

Appendix D

Information to Ex-students

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Title of Study*: Competencies In Specialists Teacher Training: What enables teachers to develop relevant competencies?*

Information for participants

Dear Colleague

As part of my PhD study at the University of Canterbury I am planning to conduct a research project under the supervision of Professors John Everatt, Angus Macfarlane and Garry Hornby. The aim of my research is to determine the extent to which students who have completed the Postgraduate Diploma in Specialist Teaching (Learning and Behaviour Diversity) perceive the course has enabled them to develop the prescribed competencies. It is hoped that this research can help to inform future development of the Specialist Teaching programme.

I would like to invite you to complete an on-line questionnaire, which will take 20-25 minutes to complete. Following the analysis of the questionnaire data, I also plan to conduct interviews with approximately 15 participants between February and April 2013. You will be asked to provide your name on the questionnaire survey so that I can contact you should I wish to request a follow up interview. The interview will take place at a time and location that is convenient for participants. In order to ensure that I record what interviewees say correctly, I would like to record the interview on audiocassette. The interview will take between 30 and 60 minutes.

I am also requesting permission to access data related to your on-line learning such as forum involvement and assessment data. Participation data will be accessed through participant's activities report available on the moodle site. The activities report documents the areas of the site participants have accessed during the course and records what participants have posted as well as assessment data. This is primarily to look for associations between course participation information and views about competencies. As a small thank you for your time, your name will be placed in a draw to win one of five $100 supermarket vouchers on receipt of your completed questionnaire.

Participation in this project is voluntary. If you do participate, you have the right to withdraw from the project at any time without penalty. If you choose to withdraw, I will do my best to remove any information relating to you as long as this remains practically achievable.

All raw data will be held securely and kept for a minimum period of 5 years following completion of the project and then destroyed. Electronic information will be stored on my password-protected site. The complete data set will be kept confidential to the researcher and named supervisors. When reporting any results of this research I shall

ensure that no information is disclosed that would enable the identification of any individuals. On completion of the research I would be happy to send you a summary of the findings of the study if you would like it. A summary of the findings and the final research output will also be sent to the Specialist Teaching Research Officer for archiving so it can be made available to staff of the Specialist Teaching Team. Findings of the study may be used in future publications and conferences.

If you have any questions about this research I would be happy to answer them and may be contacted at: marcia.pilgrim@canterbury.ac.nz. My supervisors may also be contacted at the College of Education, University of Canterbury, Private Bag 4800, Christchurch 8140. Email addresses are as follows:

Senior Supervisor: Professor John Everatt john.everatt@canterbury.ac.nz
Co-Supervisor: Professor Angus Macfarlane angus.macfarlane@canterbury.ac.nz
Associate Supervisor: Professor Garry Hornby garry.hornby@canterbury.ac.nz
If you have any complaints about the study, they may be addressed to The Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch, Email: human-ethics@canterbury.ac.nz.

I hope that you will agree to be part of this project and would appreciate it if you would indicate your agreement by completing and returning the participant consent information below via return email. On receipt of your consent form I will then send you the link to the questionnaire survey.

Thank you

Yours sincerely

Marcia Pilgrim
College of Education
University of Canterbury
Private Bag 4800
Christchurch 8140

Competencies in Specialist Teacher Training: What enables teachers to develop relevant competencies?

Participant Consent

I have read the information above and understand what will be required of me if I participate in this project.

I understand that my participation is voluntary and that I may withdraw at any stage without penalty.

I understand that in reporting any results of this project no information will be disclosed that would enable the identification of any individuals.

Yes ☐ No ☐ I agree that information relating to my learning and assessment can be accessed by the researcher.

Yes ☐ No ☐ I would like to receive a summary of the research findings.

By returning this form completed with my name and the date I agree to participate in this research project.

Name: _____ Date: _____

Please complete and return this consent form to the researcher via return email: Marcia.pilgrim@canterbury.ac.nz as soon as you can. Completed surveys to be returned by 8th April when draw closes.

Appendix E

Focus group interview schedule: questions and prompts

Participants to be asked two broad questions and prompts, developed from participant responses on questionnaire survey, used to stimulate discussion as appropriate.

Question 1: Taking into consideration all four courses of the PGDipST(L&B) programme, what were the factors that helped you to develop programme competencies?

Prompts

Face to face/online engagement

Support of colleagues

Relationships

Technology

Access to info

Question 2: Taking into account all four courses of the PGDipST(L&B) what were the factors that acted as barriers to your competency development?

Prompts

Depth and breadth of course materials

Support for gaining practical knowledge and skills.

Volume of course materials

Selecting the most appropriate material to engage with

Support from lecturers or fellow students

Time constraints

Issues with assignments

Technology

Cultural enablement and support

In conclusion sum up main points to check understanding

Appendix F
Focus Group Interview Data Reliability Check

Reliability check of barriers to competency development emerging from focus group interview data: Interview number: 2

	Barriers to competency development	Identified by researcher	Ident in rel. check
1	**Identifiable gaps in course content** *(a) More emphasis on new initiatives and issues of particular relevance* *(b) Balance of emphasis on cultural issues*	X	X
2	**Lack of pre-requisite knowledge, skills and experience** *(a) Unfamiliarity with the expectations of post-graduate study* *(b) Not knowing what course content to select* *(c) Lack of skills and knowledge relevant to the RTLB role* *(d) Lack of knowledge of Core course materials* *(e) Inadequate knowledge and experience with technology*	X	X
3	**Demands associated with completing assignments**	X	X
4	**Demands associated with programme workload**	X	X
5	**Unclear course expectations** *(a) Unclear assignment expectations* *(b) Unclear engagement expectations*	X	X
6	**Competing work-study pressures**	X	X
7	**Complex course structure and organization** *(a)concurrent first year courses* *(b)website navigation* *(c)inappropriate mentor allocation* *(d)unhelpful assignment submission dates* *(e)block course timing and content* *(f) unavailability of some domains for student viewing at start of year* *(g) insufficient opportunities for pastoral care* *(h) inadequate guidance during second year of the programme* *(i) poor visual quality of some resources* *(j) lack of access to marked peer assignments* *(k) absence of hard copy course materials* *(l) duplication of materials* *(m) inadequate recognition of substantial technology learning involved in programme* *(n) marking feedback delay and lack of familiarity with markers*	X	X
8	**Impeded access to technology**		X
9	**Isolation**		
10	**Family illness**		

Researchers agreed 9 out of 10 times

Reliability check of enabling factors in competency development emerging from focus group interview data: Interview number: 2

	Enabling factors in competency development	Identified by researcher	Ident in rel check
1	**High quality course content and materials**	X	X
2	**Readily available and accessible supports** *(a) support of course peers* *(b) support of work colleagues* *(c) support of programme staff.* *(d) support of Ministry of Education* *(e) support of family*	X	X
3	**Flexible and accessible learning options** *Blend of on-line and face-to-face* *Self direction*	X	X
4	**Relevant and useful assignments and feedback**	X	X
5	**Effective time management, personal organization and attitudes**	X	X
6	**Pre-requisite knowledge, skills and experience**	X	X
7	**Unimpeded access to appropriate technology**		X

Researchers agreed 6 out of 7 times.

Overall researchers agreed 15 out of 17 times. This represented 88 percent agreement. After discussion of the two items on which researchers disagreed, 94 percent agreement was reached.

Reliability check of barriers to competency development emerging from focus group interview data: Interview number: 4

	Barriers to competency development	Identified by researcher	Ident in rel. check
1	**Identifiable gaps in course content** *(a) More emphasis on new initiatives and issues of particular relevance* *(b) Balance of emphasis on cultural issues*	X	X
2	**Lack of pre-requisite knowledge, skills and experience** *(a) Unfamiliarity with the expectations of post-graduate study* *(b) Not knowing what course content to select* *(c) Lack of skills and knowledge relevant to the RTLB role* *(d) Lack of knowledge of Core course materials* *(e) Inadequate knowledge and experience with technology*		
3	**Demands associated with completing assignments**	X	X
4	**Demands associated with programme workload**	X	X
5	**Unclear course expectations** *(a) Unclear assignment expectations* *(b) Unclear engagement expectations*	X	
6	**Competing work-study pressures**	X	X
7	**Complex course structure and organisation** *(a)concurrent first year courses* *(b)website navigation* *(c)inappropriate mentor allocation* *(d)unhelpful assignment submission dates* *(e)block course timing and content* *(f) unavailability of some domains for student viewing at start of year* *(g) insufficient opportunities for pastoral care* *(h) inadequate guidance during second year of the programme* *(i) poor visual quality of some resources* *(j) lack of access to marked peer assignments* *(k) absence of hard copy course materials* *(l) duplication of materials* *(m) inadequate recognition of substantial technology learning involved in programme* *(n) marking feedback delay and lack of familiarity with markers*	X	X
8	**Impeded access to technology**	X	X
9	**Isolation**	X	X
10	**Family illness**		

Researchers agreed nine out of ten times.

Reliability check of enabling factors in competency development emerging from focus group interview data: Interview number: 4

	Enabling factors in competency development	Identified by researcher	Ident. in rel. check
1	**High quality course content and materials**	X	
2	**Readily available and accessible supports** *(a) support of course peers* *(b) support of work colleagues* *(c) support of programme staff.* *(d) support of Ministry of Education* *(e) support of family*	X	X
3	**Flexible and accessible learning options**	X	X
4	**Relevant and useful assignments and feedback**	X	X
5	**Effective time management, personal organization and attitudes**	X	X
6	**Pre-requisite knowledge, skills and experience**	X	X
7	**Unimpeded access to appropriate technology**	X	X

Researchers agreed six out of the seven times.

Overall researchers agreed 15 out of 17 times. This represents 88 percent agreement. Following discussion of the two items on which researchers disagreed, 100 percent agreement was reached.

Appendix G

Tables Showing Mean Importance Ratings for Each of the Five Competency Clusters

Competency Cluster 1 – Assessment and intervention	Mean Impt Ratings
Demonstrate an understanding of the nature and extent of learning and behaviour difficulties and interventions to meet the needs of students who experience difficulties with learning and behaviour. (L&B)	4.81
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate individual assessments and interventions for students who experience difficulties with learning and behaviour. (L&B)	4.90
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate small group assessments and interventions for addressing learning and behaviour difficulties. (L&B)	4.74
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate whole class assessments and interventions for addressing learning and behaviour difficulties. (L&B)	4.62
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate school-wide systems and interventions for addressing learning and behavior difficulties. (L&B)	4.40
Dem. know. of evidence-based/effective teaching & learning practices. (Core)	4.81
Critically evaluate resources and intervention strategies. (Core)	4.71
Critically discuss and evaluate curriculum and programme adaptations and solution/strength-based interventions. (Core)	4.69
Demonstrate knowledge of assessment models and practices. (Core)	4.71
Critically evaluate assessment approaches and tools. (Core)	4.71
Discuss and compare assessment practices across specialist areas. (Core)	4.26
Identify and critically analyse evidence-based practices in the area of learning and behaviour including special and inclusive education. (EBIP)	4.74
Conceptualise plan and implement an appropriate learning programme. (Prac)	4.86
Gather, analyse and appropriately use, assessment information which has been gathered formally and informally. (Prac)	4.93

Competency Cluster 2 – Collaboration and Consultation	**Mean Importance Ratings**
Demonstrate understanding of inter-personal competencies needed for working effectively with parents, whānau, teachers, other school staff and professionals not based in schools. (L&B)	4.86
Demonstrate an understanding of the concept of teacher learning and the knowledge and skills for assisting teachers and principals to create positive learning environments. (L&B)	4.67
Demonstrate knowledge of collaborative and consultative models of working and strengthening partnerships. (Core)	4.83
Share professional knowledge and skills to learn with, from and about specialist areas. (Core)	4.74
Reflect on and contribute to communities of learning and practice. (Core)	4.69
Demonstrate knowledge and understanding of principles and practices of learning with from and about other specialist areas. (EBIP)	4.57
Critically discuss the values, skills and attitudes needed for inter-professional practice. (EBIP)	4.67
Collaborate on an inter-professional case study. (EBIP)	4.48
Critically reflect on issues relating to forming partnerships with professionals and stakeholders. (EBIP)	4.67
Show leadership that contributes to effective teaching and learning. (Prac)	4.86
Establish and maintain effective professional relationships focused on the learning and well being of ākonga. (Prac)	4.90

Competency Cluster 3 – Cultural Responsiveness	**Mean Importance Ratings**
Demonstrate an understanding of Kaupapa Māori - Thinking and theorising. (L&B)	4.50
Demonstrate an understanding of the concept and role of culture. (Core)	4.74
Reflect on own cultural values, practices and beliefs. (Core)	4.71
Critique the influence of the majority culture on Aotearoa New Zealand education system. (Core)	4.45
Demonstrate an understanding of the concepts of biculturalism and multiculturalism. (Core)	4.48
Critically discuss and apply Māori and multicultural concepts and practices across specialist teaching areas. (EBIP)	4.60
Demonstrate a commitment to bicultural partnership in Aotearoa New Zealand. (Prac)	4.79
Respond effectively to the diverse language and cultural experiences, and the varied strengths, interests and needs of individuals and groups of ākonga. (Prac)	4.74
Work effectively with the bicultural context of Aotearoa New Zealand. (Prac)	4.71

Competency Cluster 4 – Professional and Ethical practice, Legislation, Policy and Curriculum issues	**Mean Importance Ratings**
Demonstrate an understanding of the RTLB role and its links to other learning and behavior initiatives. (L&B)	4.62
Demonstrate knowledge and skills in developing, delivering and evaluating RTLB operational processes. (L&B)	4.55
Demonstrate knowledge & skills in becoming an ethical and reflective practitioner. (Core)	4.71
Demonstrate knowledge and skills in using the code of ethical practice for various Specialist Teaching areas (eg Teachers Council Ethical Guidelines). (Core)	4.62
Critically discuss legislation, policy and curriculum documents across Specialist Teaching areas. (Core)	4.43
Critically review historical and current perspectives on special and inclusive education, disability and diversity. (Core)	4.62
Consult, collaborate and reflect on IEP or equivalent across specialist areas. (Core)	4.50
Understand and apply evidence-based frameworks relating to inclusion. (EBIP)	4.69
Demonstrate a commitment to sustainable practice. (EBIP)	4.63
Demonstrate a commitment to promoting the well-being of all ākonga. (Prac)	4.93
Promote a collaborative, inclusive and supportive learning environment. (Prac)	4.86
Maintain effective record keeping systems. (Prac)	4.79

Competency Cluster 5 – Professional Development, Human Development and Learning Theory	**Mean Imp Ratings**
Demonstrate knowledge of human development and learning theories. (Core)	4.64
Consult and collaborate on inter-professional implications of theories of learning and development. (Core)	4.57
Demonstrate in practice, knowledge and understanding of how ākonga learn. (Prac)	4.86
Demonstrate a commitment to ongoing professional learning and development of personal professional practice. (Prac)	4.90
Use critical inquiry & problem solving effectively in profess. practice. (Prac)	4.79

Appendix H

Tables Showing Mean Enablement Ratings for Each of the Five Competency Clusters

Competency Cluster 1 – Assessment and intervention	Mean Enablement Ratings
Demonstrate an understanding of the nature and extent of learning and behaviour difficulties and interventions to meet the needs of students who experience difficulties with learning and behaviour. (L&B)	4.10
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate individual assessments and interventions for students who experience difficulties with learning and behaviour. (L&B)	4.21
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate small group assessments and interventions for addressing learning and behaviour difficulties. (L&B)	3.95
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate whole class assessments and interventions for addressing learning and behaviour difficulties. (L&B)	3.83
Demonstrate knowledge and skills in planning, adapting, implementing and critically evaluating ecologically valid, evidence-based, culturally appropriate school-wide systems and interventions for addressing learning and behavior difficulties. (L&B)	3.54
Dem. know. of evidence-based/effective teaching & learning practice(Core)	4.59
Critically evaluate resources and intervention strategies. (Core)	4.18
Critically discuss and evaluate curriculum and programme adaptations and solution/ strength-based interventions. (Core)	4.05
Demonstrate knowledge of assessment models and practices. (Core)	3.97
Critically evaluate assessment approaches and tools. (Core)	3.95
Discuss and compare assessment practices across specialist areas. (Core)	3.46
Identify and critically analyse evidence-based practices in the area of learning and behaviour including special and inclusive education. (EBIP)	4.21
Conceptualise plan & implement appropriate learning programme. (Prac)	4.12
Gather, analyse and appropriately use, assessment information which has been gathered formally and informally. (Prac)	3.86

Competency cluster 2 – Collaboration and Consultation	Mean Enablement Ratings
Demonstrate understanding of inter-personal competencies needed for working effectively with parents, whānau, teachers, other school staff and professionals not based in schools. (L&B)	4.46
Demonstrate an understanding of the concept of teacher learning and the knowledge and skills for assisting teachers and principals to create positive learning environments. (L&B)	4.00
Demonstrate knowledge of collaborative and consultative models of working and strengthening partnerships. (Core)	4.41
Share professional knowledge and skills to learn with, from and about specialist areas. (Core)	4.59
Reflect on and contribute to communities of learning and practice. (Core)	4.31
Demonstrate knowledge and understanding of principles and practices of learning with from and about other specialist areas. (EBIP)	4.45
Critically discuss the values, skills and attitudes needed for inter-professional practice. (EBIP)	4.55
Collaborate on an inter-professional case study. (EBIP)	4.12
Critically reflect on issues relating to forming partnerships with professionals and stakeholders. (EBIP)	4.17
Show leadership that contributes to effective teaching and learning. (Prac)	4.19
Establish and maintain effective professional relationships focused on the learning and well being of ākonga. (Prac)	4.45

Competency cluster 3 – Cultural Responsiveness	**Mean Enablement Ratings**
Demonstrate an understanding of Kaupapa Māori - Thinking and theorising. (L&B)	4.21
Demonstrate an understanding of the concept and role of culture. (Core)	4.41
Reflect on own cultural values, practices and beliefs. (Core)	4.46
Critique the influence of the majority culture on Aotearoa New Zealand education system. (Core)	4.15
Demonstrate an understanding of the concepts of biculturalism and multiculturalism. (Core)	4.28
Critically discuss and apply Māori and multicultural concepts and practices across specialist teaching areas. (EBIP)	3.88
Demonstrate a commitment to bicultural partnership in Aotearoa New Zealand. (Prac)	4.38
Respond effectively to the diverse language and cultural experiences, and the varied strengths, interests and needs of individuals and groups of ākonga.. (Prac)	4.12
Work effectively with the bicultural context of Aotearoa New Zealand. (Prac)	4.21

Competency cluster 4 – Professional and Ethical practice, Legislation, Policy and Curriculum issues	**Mean Enablement Ratings**
Demonstrate an understanding of the RTLB role and its links to other learning and behavior initiatives. (L&B)	3.95
Demonstrate knowledge and skills in developing, delivering and evaluating RTLB operational processes. (L&B)	3.52
Demonstrate knowledge & skills in becoming an ethical and reflective practitioner. (Core)	4.55
Demonstrate knowledge & skills in using the code of ethical practice for various Specialist Teaching areas (eg Teachers Council Ethical Guidelines). (Core)	4.18
Critically discuss legislation, policy and curriculum documents across Specialist Teaching areas. (Core)	3.92
Critically review historical and current perspectives on special & inclusive education, disability & diversity. (Core)	4.18
Consult, collaborate and reflect on IEP or equivalent across specialist areas. (Core)	3.56
Understand & apply evidence-based frameworks relating to inclusion (EBIP)	4.14
Demonstrate a commitment to sustainable practice. (EBIP)	3.98
Demonstrate a commitment to promoting the well-being of all ākonga. (Prac)	4.48
Promote a collaborative, inclusive and supportive learning environment. (Prac)	4.26
Maintain effective record keeping systems. (Prac)	3.71

Competency cluster 5 – Professional Development, Human Development and Learning Theory	**Mean Enablement Ratings**
Demonstrate knowledge of human development & learning theories. (Core)	4.26
Consult & collaborate on inter-professional implications of theories of learning & development. (Core)	4.28
Demonstrate in practice, knowledge and understanding of how ākonga learn. (Prac)	4.26
Demonstrate a commitment to ongoing professional learning and development of personal professional practice. (Prac)	4.62
Use critical inquiry & problem solving effectively in prof. practice. (Prac)	4.05